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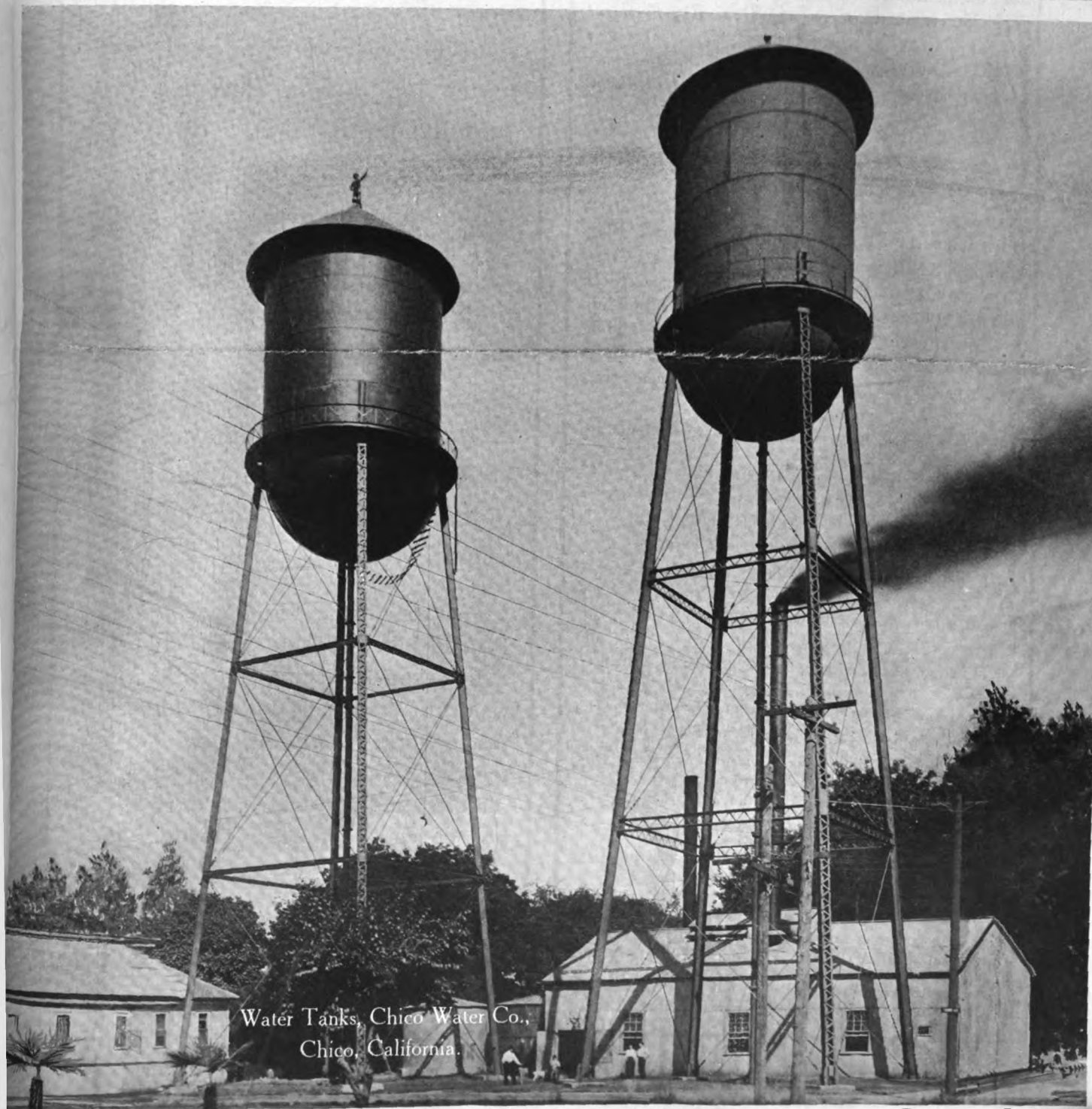
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JOSEPH DIXON CRUCIBLE COMPANY,

JERSEY CITY, N. J.

VOL. XXII

JANUARY, 1920

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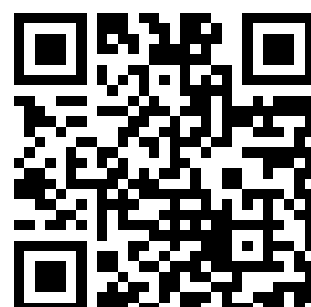


Water Tanks, Chico Water Co.,
Chico, California.

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JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

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GEORGE T. SMITH	GEORGE E. LONG
WILLIAM G. BUMSTED	EDWARD L. YOUNG
J. H. SCHERMERHORN	HARRY DAILEY
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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

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William Croft, Room 424 Lonja del Comercio, Havana

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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

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With Branch Houses in Mexico, Cuba, Peru, Argentine, Uruguay, Venezuela, Porto Rico and Colombia

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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

Canadian Asbestos Company, Montreal, Quebec, Can.



"Lend me Your Pencil?"

"Neither lender nor borrower be,"—hold fast to *your* ELDORADO. But have you found *your*

**DIXON'S
ELDORADO**

"the master drawing pencil"

Made in **17 LEADS**
*one for every need
or preference - -*

—the pencil that makes your fingers feel fit and puts a pleasant pep in your pencil work?

Our pencilogue "Finding your Pencil" tells you how to find it: a free copy to everyone who wants to ease and quicken his pencil work. Write for it today together with free full length samples, telling us what work you do and your dealer's name.

JOSEPH DIXON CRUCIBLE CO.
Pencil Dept. 190-J, Jersey City, N. J.

Canadian Distributors

A. R. MacDougall & Co., Ltd., Toronto

DIXON'S "ELDORADO"—the master drawing pencil—HB



I TAKE pleasure in sending you my regular order for Dixon's Silica-Graphite Paint, and am adding some of my experiences.

The average purchasing agent is not concerned about the quality of paint he buys. He is concerned only in saving as much money as possible for his company on the invoice price. He is not interested in the matter of economy, and does not consider how costly it is to replace, and that sometimes iron structural work becomes dangerous if permitted to become rusty.

In my opinion perhaps not more than 10 per cent. of the big companies use Dixon's Paint on their ironwork because only a few of the engineers and heads of departments take an interest in the matter of paint; but when they do realize the truth of the economy of using such a quality of paint, they decide for Dixon's.

A case in point occurred in Galveston, Tex. A cooling tower was erected to care for cooling water from 140 degrees Fahr. to 90 degrees. The sea air at Galveston is strongly corrosive, as it contains a regular mist at times, and is so full of salt that you can almost taste it. The tower was constructed of reinforced concrete, and the contractor argued that the concrete would not stick to painted ironwork, and he finally had his way. Inside of a year the interior of the work rusted so much that it pushed the concrete apart and large cracks appeared in the columns and sides. The tower leaked so that they had to tar the whole outfit to prevent leaking and to keep more moisture from reaching the interior ironwork.

I have in mind another case, which is of a smoke-stack 40 inches in diameter and about 110 feet high, at Cleveland O., which was erected in 1900. I suggested that the contract contain a clause that both the interior and exterior be painted with three coats of Dixon's Silica-Graphite Paint. The contractor advised the manager that it would cost \$186 more, and that settled it. Dixon's Paint was not used, and in five months I had to have the outside painted, as rust was showing seriously all over the stack. I was not allowed even then to use Dixon's. I was obliged to make use of a paint with a bitumastic base which cost us \$50 in labor. A year later another painting at \$62. The manager left, and in 1905 I got Dixon's Paint; but rust had got in its work. I inspected the old stack from a boat-swain's chair. I was afraid that the stack would fall from my weight and the weight of the tackle. I condemned it

Paints and Painting

By D. L. FAGNAN

Chief Engineer for D. Winant, Inc., New York City

(For want of space we have been obliged to cut out part of Mr. Fagnan's communication.)

then and there. I told the manager to wire headquarters for a new stack. An inspector came from headquarters and we gave him a ladder and cautioned him to go up in a careful

manner, as I had found that I could push the blade of my knife through the stack almost anywhere. The inspector said that the stack did not look very bad. He started up, but went only 22 feet. He stuck the blade of his knife through in a couple of places and hurried down and went to the office and sent the following telegram: "Fagnan right. Order new stack at once. Rush delivery." Well, we got the new stack and it was painted with three coats of Dixon's Paint inside and outside and when I left the company in 1909 the stack was in first-class condition. I passed through Cleveland in 1914 and it was still O.K., and if properly painted with Dixon's Paint it will be good for many years to come.

Another case was that of a steel brine tank. My advice was not taken in the matter of painting, and the tank leaked and rust ate its way through all its parts. Later I was called in for advice, and I advised the use of Dixon's Paint inside and outside, and also that all the bolts be dipped in it.

Another case was of a 40 H.P. Scotch marine boiler installed in a basement for a heating system. I advised the owner to have three coats of Dixon's Paint applied and then to cover the boiler with 85 per cent. magnesia. Instead of that he called in a contractor and had him cover the boiler without painting over the asphaltum paint which had been used at the boiler shop. Three years later he found such corrosion on the bottom sheet of the boiler that an entire new sheet was needed, and it was an expensive job. It would not have cost much more to have purchased a new boiler. If Dixon's Paint had been used as I advised, this would not have happened.

I was as foolish as others for some years. I kept experimenting with various kinds of paints and getting poor results. At the present time I do not think, nor do I know of any one else who thinks, there is a paint superior in protective qualities to Dixon's Silica-Graphite Paint when it is properly applied to clean, wire-brushed ironwork and reapplied at regular intervals after proper inspection and with due regard to surrounding conditions, such as moisture, fumes, smoke, and gases.

(To be continued)



What a Few Cans and Cards Will Do

THE above attractive window of the Belcher and Loomis Hardware Co., Providence, R. I., is a fine example of window trimming with a few cans and cards.

The central display is the well known Dixon gear case, which shows clearly how No. 677 clings to the gear teeth, whether or not the gears are in motion. More than one customer has been convinced by this visible argument. The bright red lithographed cans of Dixon's Automobile Lubricants may always be depended upon to catch the eyes of passers-by, while the photos of familiar racing drivers, all enthusiastic users of Dixon's, lend a touch of timely interest.

The Belcher and Loomis Company are to be congratulated upon this window. We are also more than glad to be able to quote the following letter from them:

"We are pleased to state that we have for many years had great success in selling Dixon's Products.

"There is no doubt as to the quality of Dixon's Graphite and Automobile Lubricants, and they have given excellent satisfaction to all our customers.

"The abnormal increased demand for your Big Six, Gear Oil No. 675, Gear Grease No. 677, Universal Joint Grease No. 676, Non-Leak Differential Grease No. 680, Cup Grease and Motor Graphite, is a credit to the missionary work of your representative.

"We beg to thank you for your hearty coöperation in the selling of your products."

What this company has done with their windows can also be easily done by others, and that it will pay by larger sales is shown by the above letter.

Efficiency With a Sufficiency

ACCORDING to the *New York Advertising Club News*, a concern up in New England went out of business a short time ago. The receivers held an auction and sold out everything that would bring any money. It is said that there was in evidence a most complete layout of office furniture. It was self-evident that some efficiency engineer had been at work, as there was enough to furnish an insurance company's home office. They had everything from mirrors to map cabinets. It was said that their office was furnished on an efficiency basis if there ever was one, and the plant was just as well equipped with efficiency systems and furniture.

But they "busted," and all of the stuff was sold to the highest bidder.

The real effective man, according to the *New York Advertising Club News*, can begin with a chair and a kitchen table as his office furniture, if necessary, and build up a business that after a while will grow to dull mahogany proportions; but it is neither the pine table nor the mahogany table that makes a business. It is the men who understand what they are about in the way of manufacturing and who understand or employ men who understand marketing, that really make a business. Of course back of it all must be the necessary capital, energy, enthusiasm, and vision.

◆ ◆ ◆

"EVERY man's life lies within the present, for the past is spent and done with, and the future is uncertain."—ANTONINUS.

To make the future more certain buy War Savings Stamps.

Charles A. Moore

Chief Engineer

SUDDENLY on Friday morning December 5th, death claimed our Chief Engineer, Mr. Charles A. Moore.

Mr. Moore has been Chief Engineer for the Company since 1912. He has had charge of the various power plants of the Company here in Jersey City, including the power plants of the Company at its graphite mines and mills, Ticonderoga, N. Y. Mr. Moore has also had full charge of the Company's cargo steamers on Lake George. His long experience as a marine engineer enabled him to take the very best care of the Company's cargo steamers, not only so far as their power plants were concerned but also the care of those steamers when they were to be laid up in the winter to undergo whatever repairs were necessary to make them fit for the following season.

Previous to his connection with the Dixon Company Mr. Moore was connected with some of the best known firms in the metropolitan district. He was the first chief engineer of the ferryboat *Bergen*, which was the first propeller-driven ferryboat to ply across the North River. He was chief engineer of the well known rapid steamer *Monmouth* of the Sandy Hook Line of the Central Railroad of New Jersey when that steamer was one of the fastest of harbor craft.

At other times Mr. Moore was affiliated with the Mallory and Savannah Steamship Lines and was employed by the United States Government to erect a refrigerating plant at Panama, Canal Zone, during the construction of the canal.

More recently, Mr. Moore served as chief engineer of the Western Electric Company and still later was with the Brooklyn Rapid Transit Company, where he was chief engineer for nine years.

Getting along in life, it was the desire of Mr. Moore to act as chief engineer for some company where the work was less strenuous, and the Dixon Company considered itself fortunate to obtain his services. Mr. Moore had a very extended acquaintance among notable men not only in the United States but in many foreign countries, as his duties as consulting and testing engineer had carried him on some of the largest steamers into all parts of the world. Those who knew Mr. Moore invariably became his friends and admirers.

Mr. Moore leaves a widow and three children, two daughters and a son, and also five grandchildren survive.

Mr. Moore was a native of Maine, where his body now rests in the family plot in Randolph Cemetery, Randolph, Maine.

Water-tanks, Chico Water Company, Chico, Cal.

THE cover illustration shows the two water-tanks of the Chico Water Company. Chico is in the north-central part of California.

These water-tanks, both of which are painted with Dixon's Silica-Graphite Paint, hold each between 130,000 and 150,000 gallons. The size of the tanks can be judged by the size of the people at the foot of the tanks and the man on top of the tank.

California is big in every way, and Dixon's Silica-Graphite Paint gives longest service for least money per year of service. It does not injure potable water. It is as sweet and pure as sand and carbon, to which it is allied.



Lead Pencils for School Use in Serbia

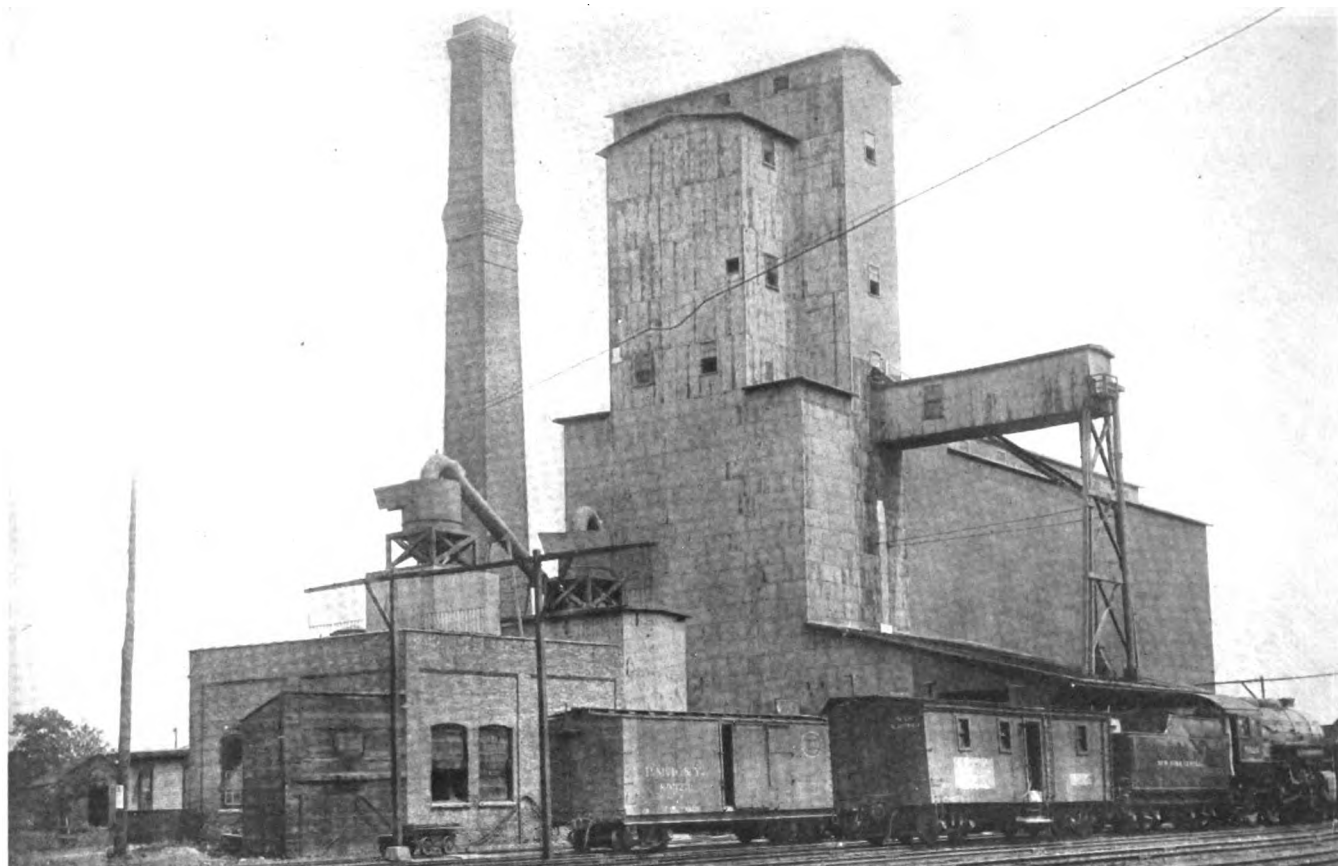
THE arrival of three thousand lead pencils in Vranje, Serbia, gladdened a number of little hearts because they meant school days had come again.

Schools had been wrecked, teachers scattered, and there were no school supplies to be had anywhere, not even the scrubby pencils usually treasured in small pockets. Everything was swept before the invader.

But the school children of America saved some of their pennies and nickels, and in addition to the lead pencils, sent ten thousand pens and penholders, a hoghead of ink, slates, slate pencils, erasers, and writing pads galore; also globes, botanical pictures, tools for manual training, metric measuring blocks, histories, and lots of other school supplies through the Junior Red Cross headquarters in Paris.

These supplies were sent to Vranje, because this town is not only the center of American relief activities, but is one of the most important in all Serbia. The American Red Cross orphanage with its 200 small guests mothered by Miss Helen King, of Washington, D. C., is situated there. Miss King has been very active in getting the public schools started again, and in looking after the welfare of all the school children in that city.

The future of Serbia will some day depend upon these little citizens, and their education has been one of the greatest problems the Government has had to contend with. So anxious are the people to have the schools reopened that teachers conduct their classes wherever possible, almost without supplies of any kind. And teachers and pupils frequently go to school on a very scant breakfast, if any at all.



**Grain Elevator, Bartlett Frazier Co.,
Kankakee, Ill.**

Eight Years' Service

REFERRING to our correspondence regarding our grain elevator. The elevator was last painted in 1911, and had the painter done as good work on this structure as he did on two other houses for the writer at other points, the elevator would not have needed repainting for two or three more years. We are, therefore, very well satisfied with Dixon's Paint.

Yours truly, **BARTLETT FRAZIER CO.,**
(Sd.) **S. Orr, Supt.**

Dixon's Silica-Graphite Paint gave eight years' service on this elevator, and Superintendent Orr states that it has given ten to eleven years' service on his other elevators.

This is convincing testimony when it comes from as experienced and reliable an elevator superintendent as is Mr. Orr of the Bartlett Frazier Company.

The elevator service is not an easy one; dry dust, chemical action of wet grain dust, attrition of storms, smoke, weather attack have all to be withstood, yet Dixon's Silica-Graphite Paint gives eight to eleven years' service, and longer, on grain elevators.

Unquestionably this is the only protective paint to use on elevators, and it is guaranteed highest quality in pigment and linseed oil.

Another Promise Made Good

SOMETIME ago, we received a letter from the Standard Granite Company, Barre, Vt., as follows:

"We have your September number of **GRAPHITE** before us and have perused the contents very carefully,

as we have always done since we were privileged to receive this very educational trade organ.

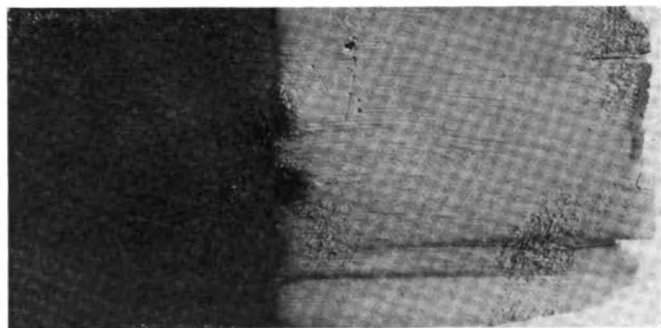
"On page 4518 of this issue we were very much pleased to see the number of men that went overseas returning to you, and also to see the reproduction of the original certificate given you by the Army and Navy Departments for your promise that you would reemploy all of the boys that went overseas or left to serve with the Army and Navy.

"Now, our little Company 'way up here in the heart of the Green Mountains made a promise to all the boys that left us to go into the service that on their return they would immediately be given their places,—if not their original position, then one as good and as remunerative as before.

"This certificate from the Army and Navy to your Company must mean a lot. As we have done likewise, and promised just what your Company promised, we wonder if we would be entitled to a certificate of a like kind to hand down to posterity as doing our little bit to make conditions worth while when the boys came back. Could you tell us where we could make application for information relative to a certificate of this nature?"

It was with a great deal of pleasure that we received a letter the other day from the Standard Granite Company advising that they have received their certificate from the War and Navy Departments.

The page "A Job for Every Star" will not appear again, as all have returned to us that so desire. Accordingly, the page as it appeared in the October issue of **GRAPHITE** is a complete list of those who left and returned.



Shingle Roofing—Seventeen Years' Paint Service

THE accompanying illustration shows a shingle which was painted with Dixon's Silica-Graphite Paint seventeen years ago. It was taken from the roof of an ice-house on the Maine Coast. It is interesting to note that the shingles on this building are still in excellent condition, owing to the remarkable protective qualities of Dixon's Silica-Graphite Paint. The building faces the sea and is subjected not only to the warm rays of the summer sun, but to the hail and sleet storms of winter, together with snow and ice and the severe attacks of salt air.

It is particularly important to keep in mind that this paint was applied after the shingles were put on the roof. Some people have claimed that paint applied in this way would form little dams where the shingles overlap, causing moisture to collect, resulting in a rapid decay of the shingles. This theory, which appears quite plausible, is shown to be absolutely untrue as far as Dixon's Silica-Graphite Paint is concerned. It is important to keep this in mind, for it is a great deal less expensive to apply the paint after the shingles are on rather than have them dipped before putting in place, which is not a satisfactory process.

On account of the high cost of labor and material there is a great advantage and much saving in cost to be obtained through applying a coat of Dixon's Silica-Graphite Paint to roofs which might otherwise have to be resingled within a few years or less. Owners of buildings in sections where the laws make it necessary to use slate or other coatings, will particularly appreciate the importance of this information. As one enthusiastic customer has stated, the saving secured through the use of Dixon's Silica-Graphite Paint made the paint and labor cost him absolutely nothing.

Début of Duesenberg 183-Cubic-Inch Racing Motor

THIS was the outstanding feature of a number of interesting details developed during the Duesenberg private speed trials held at Sheepshead Bay late last year.

This 183-inch motor is the famous three-liter engine, which is going to be the great racing innovation during the coming season. The French Grand Prix is to be a three-liter race, and so, too, is the Indianapolis event on Memorial Day. Thus the greatest classics of Europe and America are to be confined to these small-engined cars.

Bear in mind the fact that 183 cubic inches of cylinder capacity is only seven inches greater than that of the ordinary Ford motor, and two inches less than that of the Maxwell motor, while the Dodge motor, with 213 cubic inches, seems quite a giant in comparison.

In the recent trials the little Duesenberg engine turned in 100 miles in one hour, five minutes, three and one-tenth

seconds. This equals a speed somewhat over ninety-two miles per hour, which is by no means the ultimate capability of the engine. During practice spins this small Duesenberg has consistently done over the hundred within the hour.

The two other cars, one a 300-inch engine production and the other 450 inches, also made notable records. Tommy Milton, in the 300-inch car, hung up a new figure from one to twenty-five miles, doing the latter distance in twelve minutes, fifty-five and seventy-four one-hundredths seconds, which is at the rate of 116 and a fraction miles per hour.

These new Duesenberg engines are eight-cylinder affairs, with the cylinders all in a row. They have an overhead valve system, operated by an overhead cam-shaft driven by bevel gearing through a shaft driven from the forward end of the crank-shaft.

The development of these small racing cars this year has as extremely practical side. Automobile engineers are working with petroleum chemists to try and solve the fuel problem. The engineers' task is to produce a more efficient engine, one that will turn in the same amount of work for a given expenditure of fuel. The three-liter engine is unquestionably a step in the right direction.

It is interesting to know that the Duesenberg cars in this speed trial were all lubricated with Dixon's Graphite Automobile Lubricants. This fact alone is sufficient to convince any one skeptical as to the value of these lubricants that they will do all that is claimed for them, viz., reduce friction to a minimum, increase power and ease of operation.



Outlet Pipe, Winooski, Vt. Seven Years' Paint Service

SEVEN years ago, this pipe was painted with Dixon's Silica-Graphite Paint. The conditions of ice, dampness, heat, and cold are severe. The pipe is an outlet from the condenser of a turbine engine. Its diameter is thirty inches; length about forty feet. It is part of the plant of the Burlington Light & Power Company, of which Mr. H. L. Thomas is the Chief Engineer.

Engineers of Mr. Thomas' experience and intelligence do not figure "how cheap is a paint per gallon," but rather "how long does a protective paint last."

In this instance, seven years without necessity for repainting.

Remember that Dixon's Silica-Graphite Paint is known and used the world over as the LONGEST SERVICE paint, which means everything in these days of high labor charges.

Lubricating Springs of Automobiles and Trucks

A WRITER in the *New York Sun* tells us that comfort is an important consideration for the passengers in a car, and this probably may be said of chauffeurs who drive trucks as well as owners and passengers and chauffeurs who ride in pleasure cars.

Omitting much that the article says in regard to the various types of springs, the chief point is that the leaves of the springs work back and forth over each other as the frame moves up and down. There is a great deal of pressure between the leaves, particularly at the ends, and so they must be lubricated. If this is not attended to, the car will not ride so easily and the springs will squeak.

Perhaps we cannot do better than to quote from the article the following, as it well conveys our idea of the use of graphite:

"The most thorough method of lubrication is to remove the spring completely and to take it apart. Jack up the frame to take the weight off the spring, remove the bolts holding it in place, drive the pins out of the shackles at each end, and lay spring on a bench. Remove bolt holding spring leaves together. To prevent the leaves from flying apart hold them by means of a 'C' clamp or put the spring in a vise. After the bolt is removed, release the leaves gradually. If they are slightly rusty they may be touched up with emery cloth, but if they are badly rusted the rust must be removed with a file. Use graphite grease as a lubricant. Oil will run off and squeeze out, whereas the graphite grease fills up the minute pits in the steel and feeds it out as needed. Graphite tends to smooth over rough surfaces by filling the pits with a solid lubricant. Cover both sides of each leaf with grease. Then run a rod through the holes in the leaves and draw them together with a 'C' clamp or vise. If the holes are not lined up by means of a piece of metal passing through them, it will be impossible to replace the bolt. Secure the bolt firmly and replace the spring on the car. This method of lubrication has the advantage of stopping any squeaks which may tend to develop at the center where the bolt holds the spring together.

"A quicker method, but one that is not so thorough, is to pry the leaves apart. After cleaning with a stiff brush you should jack up the frame of the car so as to relieve the pressure on the springs, and then pry them apart by means of a screw-driver or cold chisel. Graphite grease may then be inserted with a knife. Oil should be injected into the parts not reached by the grease. There is a tool on the market which may be used to spread the leaves of the springs without jacking up the frame. It serves its purpose very well."

The Real Man

THE real man is found through watching him when he is mad. There is an old saying to the intent that you can judge a man after you have played poker with him and watched him lose.

Doctors in insane asylums tell us how they grade their patients and judge if they are to be encouraged with more liberty, and whether they are standing still mentally or going backward. They tell us that the simplest method is to do something that will make the patient angry, and then

they walk off and without letting the patient know it watch and study his face.

Fear and anger are the first emotions that human beings and animals develop after birth, and they are the last emotions that they lose as the mind goes.

If, in studying the irritated patient, the doctor sees the anger pass away, and signs of thought and reason appear, the patient evidently explaining to himself that anger was not worth while if kept up, then the doctor knows that the patient is on the road to recovery.

If, on the other hand, the anger remains and the patient nurses it and keeps it alive, the doctor knows that the patient is standing still or going backward, according to the intensity of the symptoms.

What the doctor tells us about the study of the insane should interest all human beings, especially those who have power and are able, without fear of losing friends, money, or position, to display ill nature.

No matter how important they may be or think themselves, they may be quite certain that the longer the fit of temper lasts with them, the weaker the mind is and the more in need of care.

Look out for yourself if you nurse ill temper, or the blues, or a fancied injury. The human mind is like rubber; when it loses its elasticity it is poor rubber and a weakened mind.

A Reminiscence

IN the so-called good old days, both the Dixon Factory and the Dixon Office ran on the fifty-nine-hour basis.

There came a time in 1885 when, after talking over the matter, we finally wrote, to bring to the notice of the "Big Boss," the following:

"We, the undersigned employees of the Jos. Dixon Crucible Company, respectfully petition that the Office of the Company be closed at two o'clock on Saturdays from June 13, 1885, to September 19, 1885 (inclusive), the customary noon hour to be dispensed with on those days.

JOHN H. CARNES,
T. B. VALLEAU,
GEO. E. LONG,
FRANK BADGLEY,
R. VAN DIEN, JR.,

JENNIE A. VAUGHAN,
H. DAILEY,
RUSSELL HOAG,
C. H. SLATER,
W. KOESTER."

The above petition was fortified with some newspaper clippings which advised the "Big Boss" that the Board of Directors of the Maritime Exchange of New York had joined the movement in behalf of a Saturday half-holiday, and that the Board of Directors of the Real Estate Exchange had also made this concession.

The "Big Boss" had a strong sense of humor and he endorsed our petition as follows:

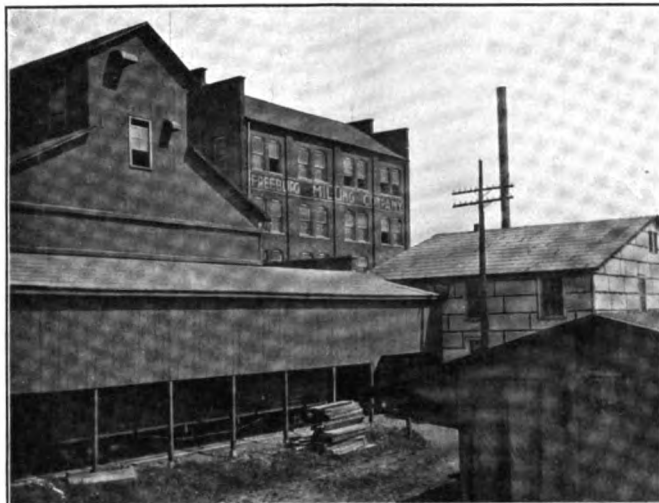
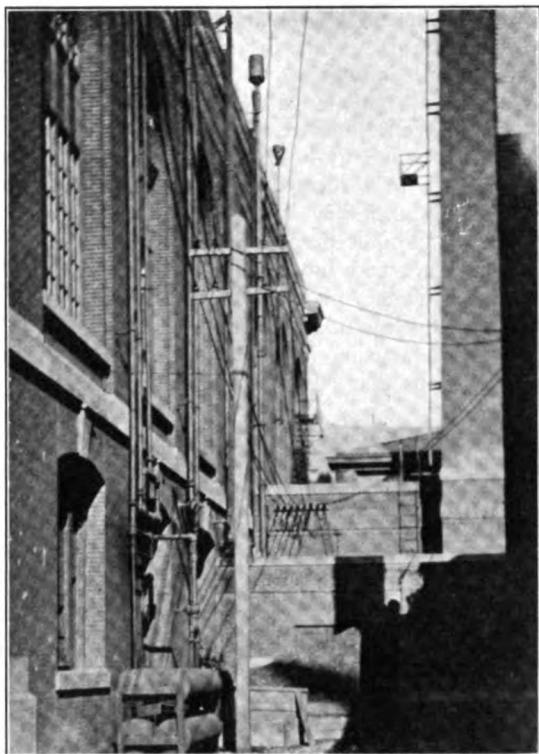
"Ask for their resignations.

E. F. C. YOUNG."

The petition was then sent back to us, and our humorist, who is still our humorist, Mr. Van Dien, put the following heading to our petition:

"DISSOLUTION NOTICE."

We are pleased to remember that the "Big Boss" was gracious enough to give us all we asked for.



**Freeburg Milling Company Elevator,
Freeburg, Illinois**

“**R**EPLYING to yours of the 2nd inst. We have found Dixon's Silica-Graphite Paint to be A1, and can recommend it to anyone looking for a durable paint. Our elevator looks as if it had been painted but a few days ago instead of two years ago.” **FREEBURG MILLING CO.**



Stevens Institute, Hoboken, N. J.

STEVENS INSTITUTE is one of America's leading technical and scientific institutions, founded by the Stevens family, endowed by Andrew Carnegie and others.

The buildings and grounds cover half a mile on a bluff rising above the Hudson River, opposite 14th Street, New York City.

In the illustrations we show the iron fences, fire-escapes, pipes, etc., of this institution, all protected with Dixon's Silica-Graphite Paint.

When a scientific school, fitted with test laboratories, decides on Dixon's Silica-Graphite Paint, is that not a good example for the general paint user? Service, however, is the ordinary user's laboratory.

Use Dixon's Paint yourself and see if it does not **LAST LONGER**, therefore saving you in labor and material. Labor is something to think of saving in these days of high costs.

Stevens has also used Dixon's Boiler Graphite, Graphite Joint Compound and Graphite Cup Grease for several years. The first cost of high class supplies is seldom much greater than for inferior articles and the last cost is considerably less.

The foregoing testimonial tells the full story.

Reliability, lowest yearly cost, highest standard only, and **LONGEST SERVICE** are Dixon paint qualities, known nation-wide and world-wide.

As the Freeburg Milling Company's testimonial suggests, a structure protected with Dixon's Silica-Graphite Paint almost defies time, looking as well two years after as two days after painting. Many Dixon records on both metal and wood work run up to seventeen years.

Dixon's Paint is a wonderful paint to resist dampness and wear. Save in brushes, labor, and material for frequent repainting (when you use an inferior paint) by using Dixon's Paint.

Use Dixon's to-day and save the cost of experiments tomorrow. When Dixon's Paint is used, it is not a Pretense, but a Performance.

The Island of Prosperity

OUR fine little neighbor Cuba is said to be that island. In 1917 her exports increased to over \$350,000,000. At the same time her purchases abroad amounted to \$260,000,000. It is estimated that her foreign purchasing power to-day is \$375,000,000, and it is expected that in 1919 the \$400,000,000 mark will be reached.

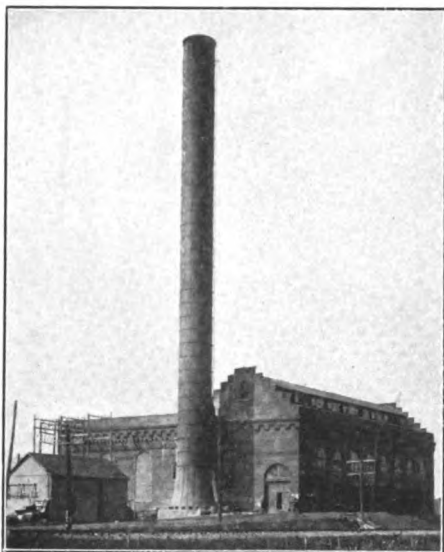
Seventy-five per cent. of Cuba's purchases come from the United States, and in Cuba the United States has an ever-increasing market for all things from foodstuffs to luxuries.

The population of Cuba is not quite three million.

Cuba's exporting power is, therefore, proportionally just double that of the United States, yet the island has not reached anything like its full development.

American goods enjoy the advantage of a rebate of 20% to 40% according to classification, on the regular tariff schedules of Cuba. This as well as proximity, sound money and natural historical sympathy, binds Cuba and the United States closely together and gives us a decisive advantage in the present struggle for the world's commerce.

This information comes to us through The Guaranty Trust Company of New York.



**Power Plant, Indianapolis & Cincinnati
Traction Co., Rushville, Ind.**

THE above illustration shows the smoke-stack at Rushville, Ind., owned by the Indianapolis & Cincinnati Traction Co., of which Mr. Charles L. Henry is President and General Manager, and Mr. S. C. Waggoner Chief Engineer.

This company is one of the most ably managed in the traction world. As a rule, the time of engineers and managers is so taken up with construction and financial problems, that they have little time in which to investigate maintenance costs.

From the letter written by Mr. Waggoner, which follows, it will be seen that he is one of those engineers who give exhaustive attention to "yearly" cost instead of cost per gallon, and his decision in purchasing is based entirely on this intelligent investigation.

"I am sending you the photograph of the smoke-stack of our Rushville Power Plant, upon which we have used Dixon's Silica-Graphite Paint for protective covering since its erection fourteen years ago. We have just repainted the stack.

"I thought perhaps you would be much interested in the knowledge of just what service we are getting from Dixon's Silica-Graphite Paint. This last coating is the fourth that has been applied during a period of fourteen years. The stack has been thoroughly protected from climatic conditions, and I have found that the cost, based on the years of service obtained from the paint, is a very small item in comparison with the service rendered.

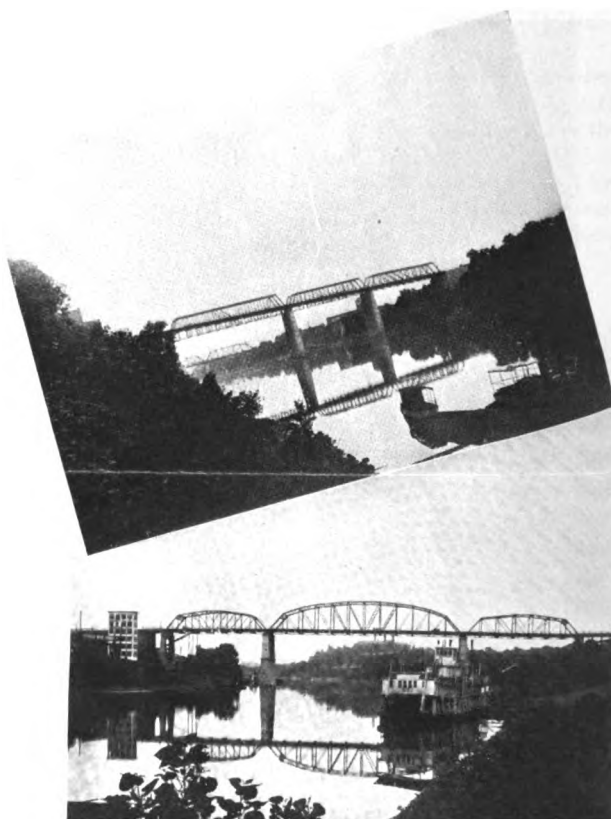
"We have never found any indication of cracking or scaling off, and I believe there is no paint on the market that has the same coefficient of contraction and expansion between metal surfaces and paint film as that of Dixon's Silica-Graphite Paint.

"Therefore I have no hesitancy in endorsing Dixon's Paint wherever metal surfaces are exposed to the elements. We have also used this paint for interior work with best results."

(Sd.) S. C. WAGGONER, Chief Engineer.

We wish it were possible to induce all engineers, managers, and purchasing agents in the railroad and traction fields, and in all industries, to follow the investigation methods of Mr. Waggoner and to base their decisions entirely on that ground. Often companies buy a paint or other supplies because of lower first cost, or because the manufacturers' plant is located on their line of road, or in their city, or because they know the salesman, who is a "good fellow." This is the old-fashioned way of purchasing, but it does not take into proper account the great cost of labor wasted when a material is poor in quality.

Dixon's Silica-Graphite Paint does not go before the market on its advertising. We request users to make the same investigations that Mr. Waggoner has made.



**Sparkman Street Bridge and Woodland
Street Bridge, Nashville, Tenn.**

THE bridges illustrated are painted with Dixon's Silica-Graphite Paint.

An interesting fact about Nashville, not generally known, is the extraordinary number of bridges across the Cumberland River. There are seven bridges within a distance of seven miles.

The Sparkman Street Bridge was completed in 1887. The foundations were built by the Holmes-Flannery Company, the steelwork furnished by the Louisville Bridge & Iron Company. Mr. Edward Mead, Engineer, Mr. R. T. Creighton, Assistant Engineer.

The Woodland Street bridge was completed in 1910. The erectors were the Foster-Creighton Company. The engineer in charge, Mr. H. M. Jones, is now chairman of the Southern District Railway Valuation Department of the Interstate Commerce Commission.

Average Wage in Tokio, 84 Cents

THE average daily wage in Tokio is 84 cents. The Tokio Chamber of Commerce has completed an exhaustive investigation into the wage question, and states that the average wage of each of the seventeen classes of workers is as follows:

Foreign tailors (cutters), \$1.25; stone masons, \$1.12½; painters, sawyers, masons, each \$1; carpenters (with food), joiners, and fitters, each 90 cents; sack-makers, tilers, other roofers, and coolies, 80 cents; foreign tailors (seamsters), 75 cents; nurserymen, 65 cents; compositors, 62½ cents; weavers, 60 cents; and matting makers, with food, 55 cents. Monthly wages, tailors (Japanese, with food), \$15.75; men-servants (with food), \$6.50; maid-servants (with food), \$3.—*Japan Society-Bulletin*.

The High Cost of Cheap Paint

BEFORE buying your paint, consider the subject from beginning to end. You have observed that you can no longer afford to postpone painting. It is your wish, although you may not have expressed it, to have re-painting put off as long as possible. You know that the cost of labor is perhaps more than that of the paint.

Therefore do not be tempted to save on the cost of a paint if you can get a paint that has demonstrated its economy.

If you will divide the total cost by the years of service (as shown by the records we have), you will make use of Dixon's Silica-Graphite Paint on all exposed surfaces, metal or wood, roofs, fences, smoke-stacks, boiler fronts, bridges, fire-escapes, etc.

Famous Advertisers

Rameses II

RAMESES II threw a stone into the Nile and sighed.

He had spent his whole life fighting and had licked all his neighbors.

He had added many slaves to his section gang, and to his treasure vaults many shekels.

But that was not enough for Ram. He wanted his fame to outlive his mummy.

"But how?" mused the great Pharaoh. The royal printing press was not yet invented and the palace house organ was out of tune.

"I have it," quoth Mr. R., as he knocked the tip off a pyramid with a

pebble and took a puff at an "Egyptian Deity."

He called together all the stone masons in the kingdom, and they chiseled his deeds of valor in rock and set it up where all might see.

Some people may call this history, but it wasn't. It was advertising.

This was four thousand years ago.

Now Rameses has a cigarette named after him.

Advertising did it.—*Ohio Print.*

Plumbism vs. Plumbago

AN American soldier went to a quack doctor and complained of a sharp pain after sitting on damp grass for some hours, during which he had frequently sucked the point of a lead pencil. The quack told him that he was suffering from "plumbism" and gave him some pills. The next day the soldier returned to the quack and said, "You told me I had 'plumbism,' which is lead poisoning, and I now find there is no lead in lead pencils, only graphite, or plumbago."

"Oh!" replied the other, airily. "Did I say plumbism is the cause of your plumbism? I meant to have said plumbago is the cause of your lum-bago."

"Oh!" said the man. "But, anyhow, your pills are only bread!"

"Of course!" replied the quack. "Don't you know that bread is the finest thing to remove pencil marks with? You didn't want me to give you India-rubber pills, did you?"—*Hardware Dealers' Magazine*.

Don't Worry—Smile

THE world knows but little of failures, and cares less. The world only watches the successes.

Stop worrying over things that can't be helped, and go and do things that can be done.

Few people care a continental for your failure. Few, if any, will help.

You may sit and magnify your mistakes, mourn and go mad over your blunders, but men will only smile that cynical smile and say of you, "He's no good."

Self-pity, sympathy-soliciting, wishing and wailing will only let you down lower.

Brace up. Brush up. Think up. And you will get up. Think down. Look down. Act down. And you will stay down.

Paint your face with a smile. Advertise that you are a success. Then think and work for it.

Whatever you think you are is the price they will pay.—*Silent Partner*.

National Carelessness

IS it true that we are as careless as other nations seem to think?

Is it true that we are indifferent to the seriousness of the unbelievable waste of irreplaceable human lives and faculties?

Mr. Arthur E. Holder, in an address before the second New York State Industrial Conference, is quoted as having said as follows:

"Long before we devised such mottoes as 'Safety first,' 'Watch your step,' 'Look out,' 'Be careful,' we had others. One said, 'I dare you.' Another said, 'You darsn't,' and the third was, 'Scare cat.' Boys and girls alike reveled in those joyous declamations of Spartan vigor and courage, and our children to-day shout with avidity these noisy exclamations of bravado. The boy who was afraid of being hurt rarely ever secured a creditable mark in his class. It seems that a certain measure of boasting, endurance, physical courage, and disdain of pain is a part of our national heroics, and that the boy who is afraid of being hurt rarely ever gets anywhere. Temperamentally we scorn those who do not dare to do. In every step in our campaign for safety habits and safety laws we, the workers, have had this disdain of danger to contend with. The foremen and superintendents of shops and factories have no regard for the worker who is timid, who will not 'take a chance,' especially when a rush job is on.

"As a people we cheer loudest for the roughest foot-ball player, the slickest base stealer, the most reckless diver; the structural ironworker, that daring acrobat, who seems most indifferent to hazard and accident while working on the dizzy heights of a modern skyscraper, appeals to our afflicted fancy as a superman."

Another writer has said that we are at heart a sympathetic and generous people. The mixture of our Irish and Pilgrim ancestors has insured this. We plunge into any enterprise, whether of a business character, a social or political reform, or charitable undertaking, with enthusiasm, and not infrequently with undue haste. But, alas, prompted by the complexity of our modern life and method of thought, we soon grow lukewarm and turn to some other endeavor to utilize our unbounded energies.

DIXON



A New Year is Before Us

Upon the threshold of this coming year let us, first of all, stop and wish you "A Happy New Year."

Ninety-three years ago Joseph Dixon made the first successful "black-lead" crucible and made possible the present method of melting metals.

During these many years, DIXON CRUCIBLES, because of their uniform quality and ability to withstand many heats, have been the choice of successful foundrymen.

In this coming year DIXON CRUCIBLES will maintain to even a higher degree their reputation for uniformity and efficiency. New conditions of foundry practice will be met and mastered, the same as new conditions in the past have been mastered. Back of these crucibles will be nearly a century of crucible-making, with its wealth of knowledge and experience.

Write for Booklet No. 190-A.

JOSEPH DIXON CRUCIBLE COMPANY

Jersey City



Established 1827

New Jersey



CRUCIBLES

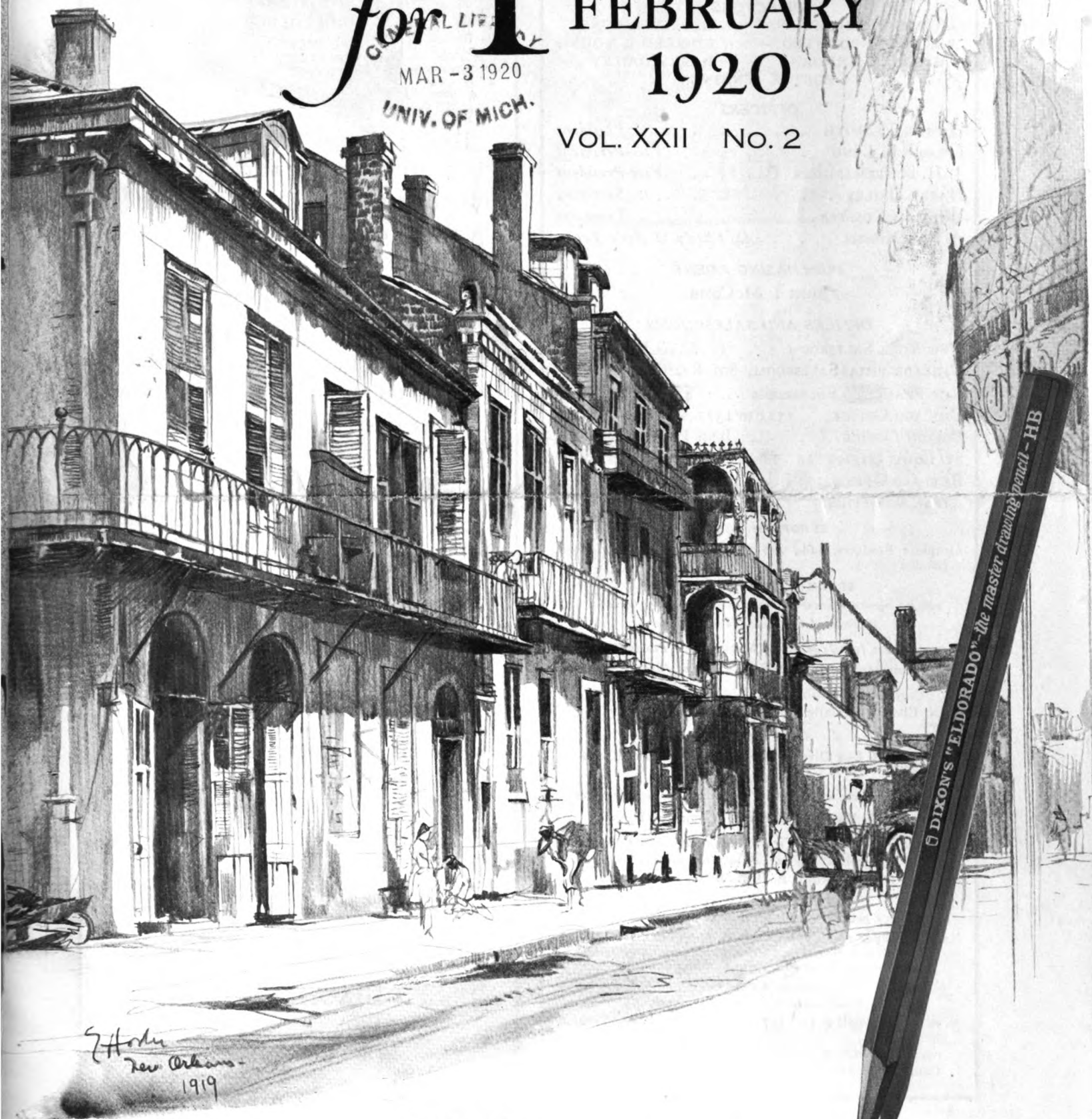
THE DE VINNE PRESS
NEW YORK

Graphite

for
MAR - 3 1920
UNIV. OF MICH.

FEBRUARY
1920

VOL. XXII No. 2



Published by
JOSEPH DIXON CRUCIBLE CO. Jersey City, N. J.

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JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1888

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

DIRECTORS

GEORGE T. SMITH GEORGE E. LONG
WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
ROBT. E. JENNINGS

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GEORGE E. LONG Vice-President
J. H. SCHERMERHORN Vice-President
HARRY DAILEY Secretary
WILLIAM KOESTER Treasurer
ALBERT NORRIS Ass't Sec'y & Ass't Treas.

PURCHASING AGENT

JOHN I. McCOMB

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SAN FRANCISCO SALESROOM . 444 Market Street
CHICAGO OFFICE 1323 to 1327 Monadnock Block
BOSTON OFFICE . . . 347 John Hancock Building
ST. LOUIS OFFICE . . . 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

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Graphite Products, Ltd., 218-220 Queens Road, Battersea,
London

SOUTH AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
ALFREDO J. EICHLER, General Agent

Agent for Argentine, Uruguay and Paraguay

E. H. Blanchard, 185 Paseo Colon, Buenos Aires

Agent for Chile, Peru, Ecuador and Bolivia

T. N. Chambers, Calle Huerfanos 761, Santiago, Chile

Agent for Brazil

M. V. Powell, Rua Direicta 7, Sala 68, São Paulo, Brazil

CUBAN AGENT

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
William Croft, Room 424 Lonja del Comercio, Havana

Agent for Porto Rico, Virgin Islands and San Domingo

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
H. Glyde Gregory, Royal Bank Building, San Juan

LATIN-AMERICAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
National Paper and Type Company, 31-35 Burling Slip, N. Y.
*With Branch Houses in Mexico, Cuba, Peru, Argentine,
Uruguay, Venezuela, Porto Rico and Colombia*

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto,
Ontario, Can.
FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.



The question of real service for metal surfaces exposed to fumes, heat or dampness is one *which must be met*. Corrosion will gradually reduce the finest piece of equipment to junk, unless the right paint is used. Owners the world over are fighting this insidious destruction by the use of

DIXON'S SILICA GRAPHITE PAINT

They have found that Nature's combination of flake Graphite and Silica as mined and milled by the Dixon Company forms the finest paint protector known. It successfully withstands fumes, dampness, acids and the abrasive action of solids, and is unaffected by heat or cold because the overlapping paint film is elastic.

How this paint has been made for over fifty years, its records of performance and its all-around usefulness, are told in Booklet No. 190-B.

JOSEPH DIXON CRUCIBLE CO.

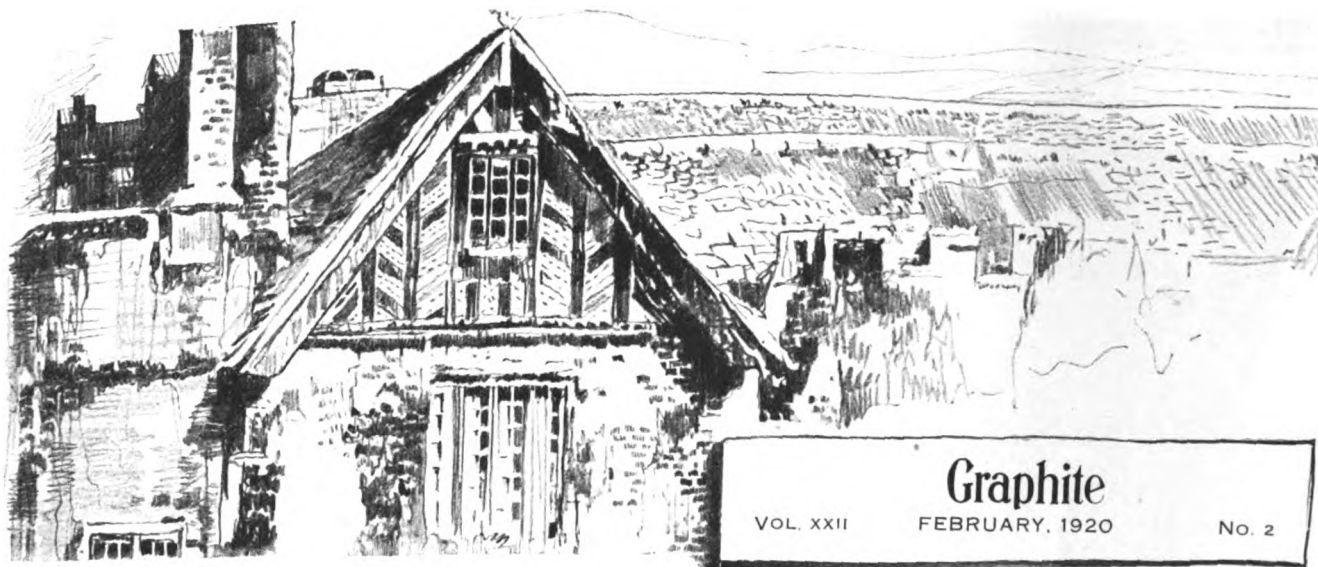
Jersey City

New Jersey



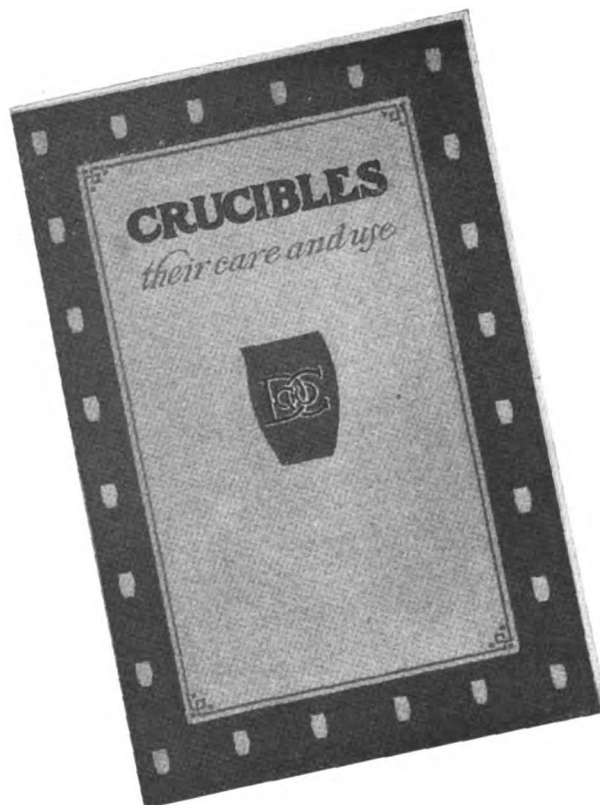
Established 1827





A FINE OLD FAMILIAR NAME

"OLD familiar faces"—and names! Among which latter let us place before you in this brief article a name which has been on the lips of very many people an uncounted and countless number of times, continually in the stationery trade for years. ¶ It is a name which stands for an uninterrupted and accumulative service of importance in the world of business. Those who have dealt with it in all this time have always spoken of it with respect. ¶ Its best friends are its oldest friends. But its new friends are legion, and they are firm, too. ¶ For acquaintance with this name comes only from use. ¶ When the war came and in its destructive fury made many more famous names but a memory, levelling great world monuments in heaps of broken stone and powder, changing the face of things, little as well as great, its breath touched our pencil line. ¶ Many accustomed names and numbers were put aside, some, perhaps, for "good and all." ¶ The Dixon Line in looks is not the same to-day as before the events we speak of took place. ¶ But all that was best of the Line remains, with new and important additions. ¶ And the best known of the old names is that which we have now to print: the plain name of a really widely known lead pencil, famous for its combination of quality with moderateness of price. Yes, we mean Dixon's "Cabinet," known and respected by every stationer, in this and other lands, as the undisputed leader of its class. ¶ "The 'Cabinet' pencil is just like money in the cash-drawer," remarked a very successful stationer. ¶ Perhaps this puts it in just the right commercial way.



"Crucibles—Their Care and Use"

MANY foundrymen do not fully appreciate the importance of keeping and handling their crucibles in a manner which will insure the greatest number of heats with the least danger of accidents, and the above booklet was published some time ago to emphasize this point.

The importance of the subject seems to be underestimated, and crucible users will find it to their advantage to give the matter more thought and attention, and instruct their furnacemen, melters, and others accordingly.

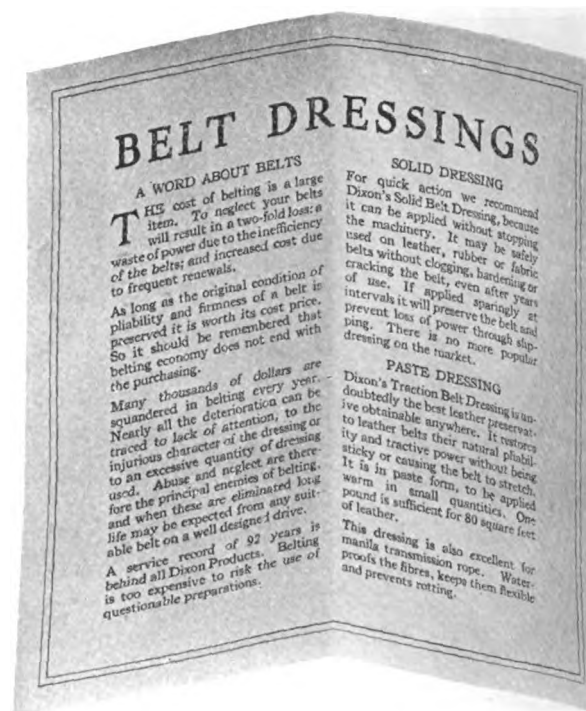
The graphite crucible is expected to withstand successfully degrees of heat sufficient to melt the most refractory metals, from composition to nickel, and no known vessel can long withstand such savage treatment.

As any defect in, or accident to, a crucible is an exceedingly annoying as well as an expensive matter, and as such occurrences are in most cases due to improper or careless methods in the annealing or handling of crucibles, the suggestions in this booklet should prove valuable, as they are the result of long experience and the best thought and knowledge on the subject.

We will gladly send this Booklet, No. 190-A, "Crucibles—Their Care and Use," to any foundryman so requesting.

Does Your Belt Slip?

AFTER January 16 the lack of sufficient nourishment will operate to reduce the waist-line of many good people, and there will be a consequent tendency for belts to slip unless they are occasionally taken up a notch. It may become a common sight to see whole platoons of dull-eyed citizens listlessly hitching at their belts while their vacant stares indicate reminiscence of better days.



However, this feature of the subject is not so important as the slippage of power belting in factories. A slight slip of a driving belt may not seem to be very important, but if all the belts in your plant could be hooked up to some device to register automatically your loss in dollars and cents, you would lose no time to correct conditions. For instance, a 36-inch belt in a certain plant runs over a 61-inch driver at 150 R.P.M., and is supposed to turn another pulley at the rate of 200 R.P.M. The slip is very slight, but it is estimated that the loss of power per year amounts to \$180. All the smaller belts throughout the plant lose a correspondingly less amount of power, but the total is considerable. Most factories throw away money in the same way, simply because no one seems to realize how serious such a leak of power really is.

Slipping is due to belts being overloaded or because they are stiff and do not cling to the pulleys. Stiff belts are dried out, dirty, glazed or otherwise neglected. When they slip on the pulleys heat is generated by friction, and that dries out the leather and shortens its life.

Belts should be kept naturally pliable by "lubricating" the fiber with some good dressing. Several reputable dressings are on the market, but Dixon's Paste Belt Dressing and Solid Belt Dressing have no superiors. Better use nothing than a preparation of doubtful character that may rot the fiber or cause the belt to stretch. Belting is too expensive to be ruined through carelessness.

Belting should be clean, and if the ends are not lapped the lacing or other connections should be kept in order. Any little defects which may develop at the joints should be promptly repaired, and the belts should be dressed occasionally with a good belt dressing.

Abuse and neglect are the principal enemies of leather belting, and when these are eliminated a long life may be expected from any suitable leather belt on a well designed drive. And don't forget the enormous savings that can be brought about in the U. S. A. if everybody would cut out the needless waste of belts and power due to slipping.

The French Quarter in New Orleans

(See Cover)

A DISTINGUISHED American designer and etcher, Mr. Earl Horter, contributes this month's cover for GRAPHITE. Mr. Horter's position amongst the etchers of the country is an enviable one. He has served in high official positions in the American Society of Etchers. His work has appeared for a number of years at all of the important exhibitions of prints, and recently he was honored by the print dealers of the country in an exhibition composed entirely of his plates. Mr. Horter's lead pencil sketches are charming and forceful. And that Dixon's ELDORADO—"the master drawing pencil"—helps not a little the success of this part of his work can be seen by the following letter written to us by him on the subject:

"I like your ELDORADO pencil for three reasons. It is friendly to my touch, responsive to my mood and it reproduces better than any other pencil I have ever used.

A definite, clear cut quality is essential in every drawing that is made for high-light halftone.

Even soft tones made with the ELDORADO seem to carry a certain hidden depth that helps the camera.

It is a fine, capable pencil and I like it very much indeed."

EARL HORTER.

The sketch presented on the cover shows a portion of the French Quarter in New Orleans, that bit of Old France and Sunny Spain which has so much attraction for visitors to "N'Orleans." Mr. Horter's work for the "Metropolitan" magazine took him to this city, and he speaks with enthusiasm of the quaintness of the section which is the subject of this sketch: the houses, streets, customs and the famous eating-places with their unique French cuisine.

Loafers

THE loafer is a leech on the body of society. He may be a temporary affliction or a permanent institution. In either case he is a nuisance. The loafer without visible means of support is a menace. The loafer with visible means of too much support is an indictment of the justice of our civilization.

The loafer is without respect for the rights of others. If he is without possessions this lack of respect shows itself in theft or a form of begging that is but theft under another guise.

If he possesses much his failure to understand that others have rights is shown by his willingness to waste the time of those who cannot afford to loaf.

Our enemies do not loaf with us. Only our worthless friends call on our busy days to torment us and to test the virtue of our religion. Because they are our friends we feel under obligation to show them a measure of courtesy. We listen with one ear to the endless drivel of their conversation. We smile while our souls are seething with a desire to indulge in homicide. We tap on the desk with our fingers, rustle sheets of paper, clear our throats, twist in our chairs. Nothing avails. The loafer has set about the business of killing so much time at our expense and nothing can divert him.

To consume while one does not produce is obviously dishonest. To consume and interfere with others who are engaged in the business of production is the unpardonable sin.

—Saturday Evening Post.

"The Guide-Post"

"MANY men of many minds" explains the variety of styles in which we make Pencils, Crayons, Erasers and Penholders.

Seen at a glance, this variety is bewildering to the uninitiated. And it is undoubtedly true that at one time there were many useless duplications in pencil styles which have disappeared completely within the last two or three years.

The Dixon Pencil Line as it has been standardized contains an ample variety of materials for writing and for drawing—for marking in black and in color on materials and surfaces of all descriptions.

To explain the uses of each article in the Dixon Pencil Line, we have decided to devote a full column in each issue of GRAPHITE. And we hope this column will become identified in your mind with a sincere attempt to make you better acquainted with the uses of the stationery and drawing articles manufactured by this Company.

TO OFFICE WORKERS:

The stenographer, the clerk, the office executive, each should have a smooth, responsive lead that speeds the work—a firm, strong lead that eliminates the frequent interruptions through breakage and crumbling points.

Those who use a pencil most appreciate the ELDORADO most. Its smooth, easy-flowing lead makes a noticeable saving of effort. The ELDORADO not only permits quicker, easier work, but it leaves the writer less tired at the end of the day.

We recommend, as the pencil which will best suit your work, the following:

ACCOUNTANTS:

Accounting calls for many degrees of hardness in leads, of which the following are representative of popular choice:

Checking—4B.

Figuring—B, HB or F.

Totals—extensions—2H to 5H.

CLERKS:

Office—F.

Shipping—4B.

Manifolding—4H.

STENOGRAPHERS:

(Pitman system) 2B, B or HB.

(Gregg system) HB, F or H.

EXECUTIVES:

HB.



DIXON

THEIR MARKS
stand out "clear
and bold" on iron
and steel; on stone
and concrete; on the
raw log in the forest
as on the finished
lumber in the yard
and shop.



"STAND

ER CRAYONS



THEIR COLORS are:

No. 523	.	.	White
492	.	.	Pink
520½	.	.	Soft Red
520	.	.	Red
493	.	.	Orange
496	.	.	Yellow
522	.	.	Green
521½	.	.	Soft Blue
521	.	.	Blue
485	.	.	Violet
497	.	.	Terra Cotta
495	.	.	Brown
494	.	.	Carbon Black

THE SUN"

Is Life Just a Gamble or What You Make It?

THEY say that life is a gamble, but I feel sure that the gamble part of it depends upon the individual. Standing in front of the World Building the other day, my glance fell upon an "outer" who was once a star reporter for two or three of the big dailies of the city. This man averaged twenty years ago about \$300 per week. After several years of remarkable success as a writer he took to drink. First it was in fancy places in which he hung out. Then, as he dropped in the social scale and in capacity to earn money, he kept moving from upper Park Row and finally into the lower Bowery. He is now not far from sixty-five years of age and his only income is that which is secured through panhandling.

Within a few minutes after this old star writer passed by, I was saluted by a strapping fellow of about thirty-five. In his teens this man sold newspapers in front of the old Sun Building. You, perhaps, remember the chap. He used to stick his different selections of newspapers between the iron bars of the fence that ran around the corner of the Sun Building. Whether you do or not, this boy spent every nickel of his earnings, except that used for board and scant meals, in giving himself an education. To-day, this former newsboy is secretary to one of the directors of the Standard Oil Company. He is drawing down \$125 per week. As he climbed to this position after going through one job after another for ten years, it can be easily guessed that he is making good. Is life a gamble, or is it just a question of what you make it?—*Newspaperdom*.

Unrest and Work

THE truest thing that has been said about the condition of the world to-day is that hard work is needed. The unwillingness to work hard for a given return is at the root of most of the troubles, alike in the United States and in Europe. The disposition—or indisposition—is so general that it is clear it has a psychological origin. Whether it is a necessary result of war or not, it is a result of the war that ended fourteen months ago. The attitude of labor is the same in the United States and in Great Britain, but in the latter country the attitude is more pronounced, and as Britain had more war than we did the difference in degree is only natural. Even such superficial studies as have been made of the high cost of living in the United States show that the indisposition to put forth great effort is a common one, not confined to workmen but exhibited by wholesale and retail dealers who aim to make much larger profits per unit of turnover. Nor does the indisposition stop there, for the buyer shows less disposition than he should to make his purchases with discretion. He, or she, pays the price asked by the corner groceryman and then complains of the high cost of living.

The only hope of solution of the whole matter is to regard these various developments as constituting but one problem, a problem with a psychological basis. The will to labor must be fostered by all means that can be found. Neither the preaching of sermons nor the passage of laws, nor any single thing, can be the adequate corrective. The minds of men are affected with a poison for which there is no one antidote, and all the remedies available must be applied.—*The Iron Age*.

Paints and Painting

By D. L. Fagnan

(Continued from January)

The ironwork in our new garage and the iron body of our four automobile frames are to be painted with Dixon's Silica-Graphite Paint. Every bolt and nut assembled is dipped in Dixon's Natural Color. The future pulling apart will have no terror for myself or workmen. The tin roof of our main building is also protected with Dixon's Silica-Graphite Paint, and no roof repair has occurred for some years. A yearly coat goes on the roof and I forget it for another year. Our smoke-stack, ammonia condenser coils, rectifier coils, etc., are wire-brushed yearly, and painted with Dixon's Paint and my troubles are over for a year. My experience as an erector of oil engines, Diesel and other oil and gas engines, and refrigerating machinery, dates back some twenty-two years. Operating such engines, as well as erecting them and altering, etc., has given me a lot of valuable experience. I certainly know how serious corrosion is on metal-work. I believe I know how to prevent it as well as it can be done with the knowledge available from years of experience, and I want to say that Dixon's Silica-Graphite Paint is the ultimate in protective paints. Until I find something superior I will stick to it. My experience has been gained in every State in the Union, with all kinds of water and fumes from smelters, refineries, breweries, power plants, etc.

Fake Whiskey Deaths Sweep United States as Plague

Dead, Dying and Blinded are Mounting into Hundreds

THE above heading appeared in a New York paper during the Christmas holidays, and similar headings appeared in many papers in the United States.

Fake whiskey is not the only fake product put on the market. It has lately come to our attention that there are fake paint manufacturers.

An old-time and well satisfied customer wrote us that the last shipment of Dixon's Silica-Graphite Paint was of very poor quality and in no respect like former shipments. We asked the railroad company's bridge engineer, as the complaint was from a well known railroad, to do us the favor to investigate the matter thoroughly. The engineer advised us that the package was stencilled "Dixon's Silica-Graphite Paint," but, curiously enough, the paint was not shipped from Jersey City. Later on he sent us the stencilled boards of the case that contained the paint, together with the name of the concern making the shipment, and plainly stencilled on the boards were the words "Dixon's Silica-Graphite Pt."

We consider that any concern that would deliberately do a thing of this kind is a concern that needs looking after, and that the offense is serious enough to place the matter in the hands of our lawyer, which we promptly did.

The Dixon Company, in its many years of successful business, has built up a reputation for its product which the Company does not propose to have any concern tamper with.

For Sleepers in Church

"HEAR this, ye sleepers, and be wise,
And shut no more your slumbering eyes,
For 'tis an awful truth to tell
That you can never sleep in Hell."

—From a little girl's poem.

Americans Learning Something About Foreign Countries

THE average and busy American has always been a little off on his geography, even that of his own country. When asked the size of California and if he thought it was as big as the State of New York, he sometimes said, "Yes, perhaps it is," and then again he said, "Of course not." As a matter of fact, California is as large as all the New England States, New York State and Pennsylvania, put together. If California were placed in the Atlantic Ocean, one end would be at Portland, Maine, and the other end at Florida.

When asked about South America, the average American has looked upon it as a small country south of the Panama Canal. He has had no idea that there were twenty different Republics in South America and that in one of them the entire United States could be placed and still have room for what was the German Empire.

The average American has looked upon Cuba as a small island about the size of Long Island, perhaps not quite as large. It is over 700 miles long.

When it came to some of the foreign countries, he was entirely at sea.

Mr. James H. Perkins, executive manager of the National City Bank of New York, tells us that perhaps ten years ago, if anybody asked him where the Balkans were, he would have said that he did not know, but that he thought it was the place where the hero of "The Merry Widow" came from, or something of that kind.

Mr. Perkins adds: "And I also know that in the fall of 1915 we received a telegram from Sir Edward Holden, of the London City & Midland Bank, asking our opinion as to how large an Anglo-French Loan could be floated in the United States. We had a conference of about eight or ten experts and the consensus of opinion was that whereas \$50,000,000 was the maximum single issue which the bond market in the United States would absorb, nevertheless, because of the sentiment attached to this particular proposal, we might be able to sell as much as \$100,000,000. They came over here and in a few days disposed of over \$250,000,000 of their bonds. Not only that, but they came back again.

"The fact is that the whole investment situation has vitally changed in the last four years, and has greatly expanded in scope and significance."

"This One Thing I Do!"

GENIUS is nothing but the power of making a continuous effort. Fix in your mind the thing you are going to do, the thing that is worth while, and then do it with determination.

A salesman is a genius who has the power of living up to the motto "This one thing I do," the power of continuous effort. The genius of being successful can be reached by applying great diligence to this continuous effort; by keeping everlastingly at it.

There is no obstacle that cannot be overcome by the man who puts force and intelligence into his work. Obstacles are great only through lack of trying diligently and continuously to overcome them. They will be overcome unless there is an inherent weakness of purpose on our part.

—R. J. James, *Motor Trade*.



Window Display of the Nathanson Auto & Supply Co.

THE above illustration shows two views of a recent display of Dixon's Graphite Automobile Lubricants in the windows of the Nathanson Auto & Supply Co., New York City.

The upper photo shows a way of displaying the Dixon cans so that all of them will be plainly visible. That is by placing them on shelves which are put up in tiers.

The lower photo is the more interesting, as it shows more clearly the mirror which was used to reflect the inside of the Dixon gear case. This is a rather novel way of bringing the gear case to the attention of the passers-by.

Good use has also been made of the photographs of prominent racing drivers who use Dixon's Graphite Automobile Lubricants in their racing cars.

We are always glad to publish in GRAPHITE windows such as the above and will use all that are sent in to us.

Rules for Finding Length of Belt Required

WHEN it is not convenient to measure with the tape line the length required, the following rule will be found of service: Add the diameter of two pulleys together, divide the result by two, and multiply the quotient by $3\frac{1}{2}$; add the product to twice the distance between centers of the shaft and you have the length required, substantially. If one pulley is considerably larger than the other, a little extra allowance should be made, because the distance from the center of the top of one to the center of the top of the other is a little greater than the exact distance between the centers of the shafts.—*Can. Machinery*.



Delaware River Bridge, Washington Crossing, N. J.

GEORGE WASHINGTON, with 2,400 men and 18 cannon, on their way to the Trenton victory, crossed the Delaware River at this point in the dead of winter. Two of his commanders failed to make the crossing, but Washington was invincible.

Many, no doubt, have seen the historic painting of the scene in the galleries of the Metropolitan Art Museum, New York City.

The bridge illustrated above was painted with Dixon's Silica-Graphite Paint in 1908 and again in 1914, and is to-day in fair condition, a service of six years after each painting. Many of Dixon's records run even longer than this.

Dixon's is a "Victory" paint in long service, in lowest cost per year of service, in guaranteed First Quality only. The unconscionable labor charges make frequent repainting an immense waste. Frequent repainting is necessary when low-priced paints are used. The few cents more per gallon when Dixon's Silica-Graphite Paint is used, provide **MORE MONTHS AND MORE YEARS** of service. Dixon's, moreover, is the best bridge paint, invincible against weather, wear, expansion, brine drippings, acids, smoke, fumes, cinders, and other rust-producing agencies. It is standard with experienced bridge engineers.

Conversion of B. t. u. into Horse-power

HOW many horse-power will be developed by an expenditure of 210 B.t.u. per minute? S. C.

The mean value of most trustworthy investigations for determination of the mechanical equivalent of heat, founded on experiments in which mechanical work was transformed directly into heat and electric energy was changed into heat, when reduced to mean B.t.u., gives the result,

$$1 \text{ mean B.t.u.} = 777.54 \text{ standard ft.-lbs.}$$

For ordinary calculations the value 777.5 ft.-lbs. is taken.

As a horsepower is development of energy at the rate of 33,000 ft.-lbs. per min., an expenditure of 210 B.t.u. per min. would develop

$$(777.5 \times 210) \div 33,000 = 4.95 \text{ hp.}$$

—Power.

Is It a Gold Brick?

Promising Great Business and Riches in Export Fields

UNDoubtedly there are very many manufacturers getting letters similar to what the Dixon Company is daily receiving from various parts of the United States.

We refer to a letter that contained an offer to open up export business in a way that we have never dreamed of; further, to open our eyes to possibilities that we have never thought we would be able to see. These letters certainly open our eyes to the fact that there are a number of people who are quick to seize an opportunity to better themselves financially, even though they are obliged to do it in very quick time and then to fold their tents and seek some other clime.

The last communication that we have received promises us names and addresses of the most reliable machinery dealers, jobbers and importers in the countries "where there are proved and ready markets for your goods." It offers lists of specific manufacturers in all parts of the world "and each name is rigidly guaranteed on a pro rata refund basis."

We are told that some of our next-door neighbors are now shipping all over the world the kind of goods we make. That surprises us especially, and we are told that their customers are looking for competitive prices and we are asked why we don't quote them.

Well, we don't quote competitive prices to anyone. We make high grade goods and are getting the proper prices.

We are told not to turn our back on exportation. Well, as we have been exporting goods for about three score and ten years—perhaps longer, as this is our ninety-second year—it may be that we were exporting goods before these exploiters of exportation burst upon the world that has evidently been waiting for them.

We are finally told, after considerably more pyrotechnic writing, to "please send \$5 with your order." We shall hold on to that \$5.

◆ ◆ ◆

"A LITTLE kissing now and then
Is why we have the married men.
A little kissing, too, of course,
Is why we have the quick divorce."

Twenty-four Years' Paint Service

MR. A. P. BENSON, of Dedham, Mass., has sent the Dixon Company a piece of wood taken from his building, painted twenty-four years ago with Dixon's Silica-Graphite Paint.

The wood is in perfect condition, and plainly shows the silica-graphite film adhering to the wood and protecting it after all the years of hard weather and wear in Massachusetts.

We are adding this interesting exhibit to the Dixon museum for the inspection of those interested.

Some 1920 Days

IT is interesting to know upon what days various holidays will fall during 1920, and this list has been made up for the convenience of our readers.

Lincoln's Birthday	
Thursday	February 12th
Washington's Birthday	
Sunday	February 22d
Easter	
Sunday	April 4th
Decoration Day	
Sunday	May 30th
Fourth of July	
Sunday	July 4th
Labor Day	
Monday	September 6th
Columbus Day	
Tuesday	October 12th
Thanksgiving Day	
Thursday	November 25th
Christmas	
Saturday	December 25th

What is a Pep-ti-mist?

A PESSIMIST closes an eye, wrinkles his face, draws up the corner of his mouth and says, "It can't be done."

An optimist has a face full of sunshine. He beams on you and says, "It can be done"—and then lets Joe do it.

But a pep-ti-mist takes off his coat, rolls up his sleeves, goes to it and does it.

So let's all be PEP-TI-MISTS in 1920.

I borrowed the word, you borrow the resolution and we both win.

THOMAS C. SHEEHAN, President,
Durham-Duplex Razor Co.

No Balancing Up to Do

A MAN has lately died in New Jersey in whose will nothing is left to charity.

He states in his will that he leaves nothing to charity as he has no evening up to do after death. He adds:

"For forty years I have devoted 10 per cent. of my gross income as a 'sacred fund,' which was given to public, religious and charitable institutions. In this way I have had the great joy of personal and continuous participation in the needs of these charities. It is not necessary for me, for that reason, to make special gifts."

He does not leave a large amount of money. What he does leave, he divides among his several children, warning his sons and daughters to avoid speculation in the hope of large gain and advising them not to invest in the business of other persons the money he bequeaths to them.

The writer of this was quite well acquainted with this man and remembers his many charities and the interest he took in all benevolent matters.

Government Ownership

Who is the Greatest Autocrat
in the Republic?

IN the debate which preceded the discussion of the provisions for the Employment Service of the United States, Mr. Goode, of Iowa, proposed an amendment to the bill, which the House adopted, providing:

"That no part of the money appropriated by this act shall be used for any personal services or to pay for any advertisement, telegram, letter, or circular designed to defeat or enact any proposed legislation by Congress or to influence any member of Congress in his vote on any appropriation unless specifically authorized."

It was said that there can be no doubt that the testimony submitted from all parts of the United States with respect to the practical operation of the Employment Service has convinced Congress not only that it was incompetently managed, and, in many instances, administered with invidious discrimination, but that the conduct in one case of privately investigating without authority of law and then refusing to verify charges before the constituted authority, had utterly destroyed confidence in that particular officer.

Collection Letters That Were Appreciated

A LARGE manufacturing concern sent frequent and urgent demands to a certain delinquent dealer, and, being unable to get so much as a response, sent a representative to wait upon him personally.

"Why haven't you paid your account, or at least written us concerning the matter?" the representative asked.

"My dear sir," responded the delinquent smilingly, "those collection letters from your firm are the best I have ever seen. I have had copies made and am sending them out to the trade, and it's wonderful the number of old accounts I have been able to collect. I haven't paid my bill, as I felt sure there was another letter in the series. I have some hard customers to deal with and I need that last letter."

—Coal Trade Journal.

Creating

BACK of the beating hammer,
By which the steel is wrought,
Back of the workshop's clamor
The seeker may find his thought,
The Thought that is ever
Of iron and steam and steel,
That rises above disaster
And tramples it under heel.

The drudge may fret and tinker
Or labor with laggard blows,
But back of him stands the Thinker,
The clear-eyed man who knows;
For into each plow and saber,
Each piece and part and whole,
Must go the Brains of labor;
Which give the work a soul.

Back of the motors humming,
Back of the belts that sing,
Back of the hammers drumming,
Back of the cranes that swing,
There is the eye which scans them,
Watching through stress and strain,
There is the Mind which plans them,
Back of the Brawn, the Brain.

Might of the roaring boiler,
Force of the engine thrust,
Strength of the sweating toiler—
Greatly in these we trust;
But back of them stands the Schemer,
The Thinker that drives things
through—
Back of the Job—the Dreamer,
Who makes the dreams come true.

—Anon.

ONLY DIXON'S ELDORADO

There is no "just as good."

Your customer knows this.

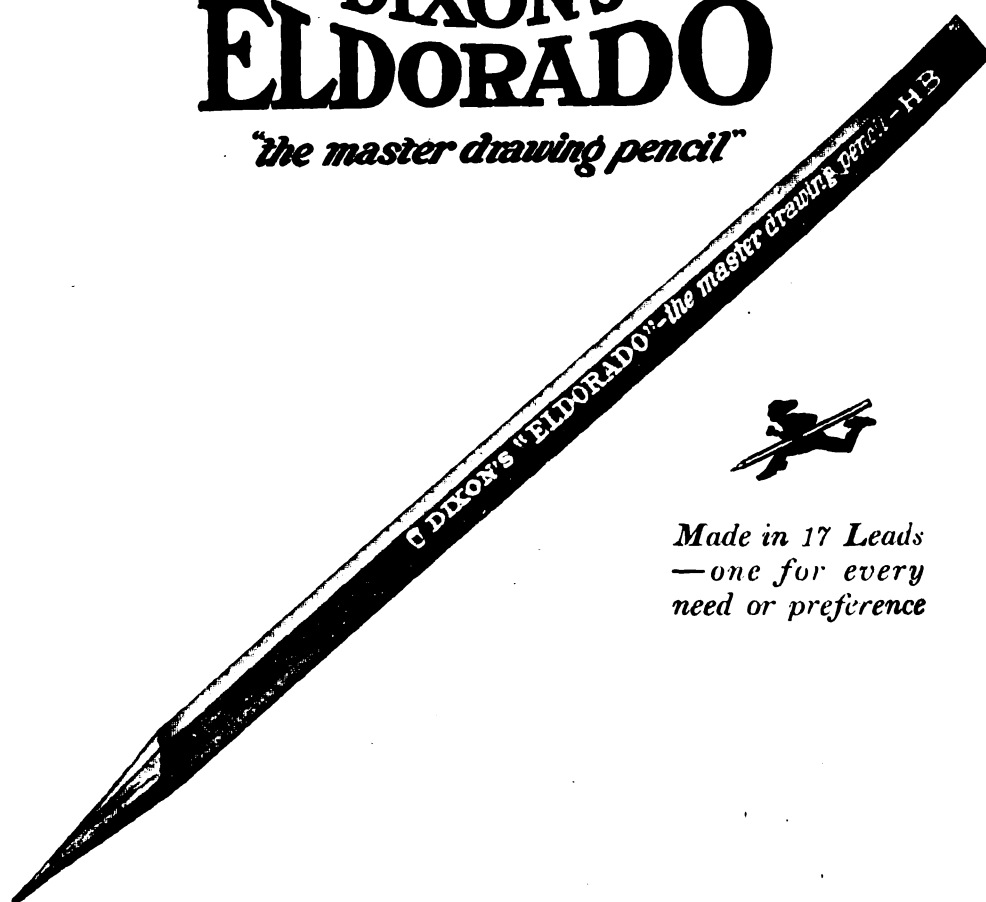
One of the 17 ELDORADO pencils is *his* ELDORADO.

It eases and quickens his work.

He knows it does.

Reach him the precise
ELDORADO he asks for.

**DIXON'S
ELDORADO**
"the master drawing pencil"



*Made in 17 Leads
—one for every
need or preference*

JOSEPH DIXON CRUCIBLE CO., PENCIL DEPT. 190-J, JERSEY CITY, N. J.

Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto

THE DIXON PENCIL
MADE IN U.S.A.

Graphite

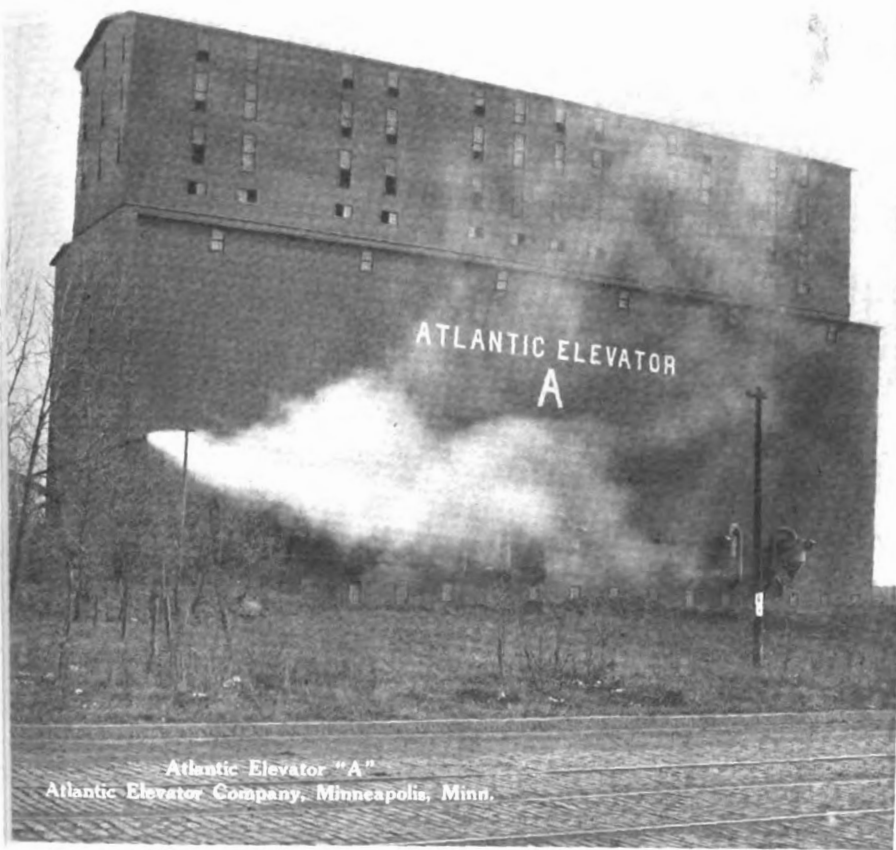
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MARCH, 1920

No. 3



Atlantic Elevator "A"

Atlantic Elevator Company, Minneapolis, Minn.

JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



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Graphite, Plumbago, Black Lead**



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U. S. A.

Volume XXII

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SCIENTIFIC LUBRICATION

AT a meeting of the Motor Truck Association of America, Mr. A. C. Russell, Special Representative of the Vacuum Oil Company, spoke on the subject of Scientific Lubrication. His thoughts conform so closely with our own, that we are taking the liberty to quote several paragraphs from his address.

It is unfortunate that space does not permit us to reprint the entire article, for it is well worth reading. The remarks are confined to oils, but the same reasoning applies equally well to greases. The only way to determine whether a certain grease is a proper lubricant for a certain part is to try it in service and watch the results. All the chemical specifications we hear so much about are useless. A chemist can analyze a grease—Dixon's No. 677 for instance—and send the analysis to several grease makers to have them bid on similar lubricant. They may all submit samples that answer the specifications, but it is probable that no two of them will be alike in appearance or in action. The same is true of dry lubricating graphite. Don't be fooled by near-scientific

twaddle unless you are willing to take a chance. If you want a "sure thing" in lubricants, the only way to get it is to state the manufacturer's trade name for the article required. You cannot get it by making tests in a laboratory. It is safer and less expensive to trust your problems to a reputable concern who has made a study of lubrication. The following is a part of Mr. Russell's speech.

"The subject of lubrication is very important to truck owners. Lubrication of any piece of machinery is the most vital thing concerning the life of it. The life of machinery depends upon its lubrication. I think the most of us do not realize the importance of lubrication as regards the life of our trucks. Many of us think that oil is oil, a truck a truck, a part is a part, all automobiles are built alike and as long as one oil lubricates one, it will lubricate them all. It is all wrong. Oil is not just oil. All oils will lubricate, of course. That isn't what you want. You want correct lubrication. There is considerable distinction between lubrication and correct lubrication, and all trucks are not

built alike, as you know, because one part does not fit them all.

"In lubricating an internal combustion motor such as are used in automobiles, there are many things to consider. It is my opinion that the average layman who has not made a study of internal combustion motors, certainly has not made lubrication a particular study.

"When all is said and done, there is only one place to test an oil and that is in the car, on the road. That is where you are using it. You want to know what it will do in the car on the road. That is what interests you. What it will do in a laboratory doesn't concern you in the least, because you are not using the oil in the laboratory, you are using it in your truck.

"There are many claims by various manufacturers concerning their lubricants. They are all best, of course. Some make oils that are better than others. How are you going to decide? Are you going to keep changing every day, and can you afford to experiment on that basis with expensive equipment? If there are some oils on the market that are better than others you want to know it. When I say that you cannot afford to experiment, there is food for thought there. As a matter of fact, a canvass of the repair shops in Greater New York shows that from 60 per cent. to 75 per cent. of the motor-car troubles of the present day are caused as a result of incorrect lubrication. Just think of it! Suppose that statement is exaggerated. Let us presume temporarily that it is. Suppose that you could reduce your repair bills 25 per cent.,

isn't that food for thought? Suppose that you could reduce your fuel consumption materially and reduce your lubricating oil consumption materially and reduce your carbon deposit materially, increase the pulling power of your truck, increase its compression? If correct lubrication will do just half, you want to know about it."

"Little Old New York"

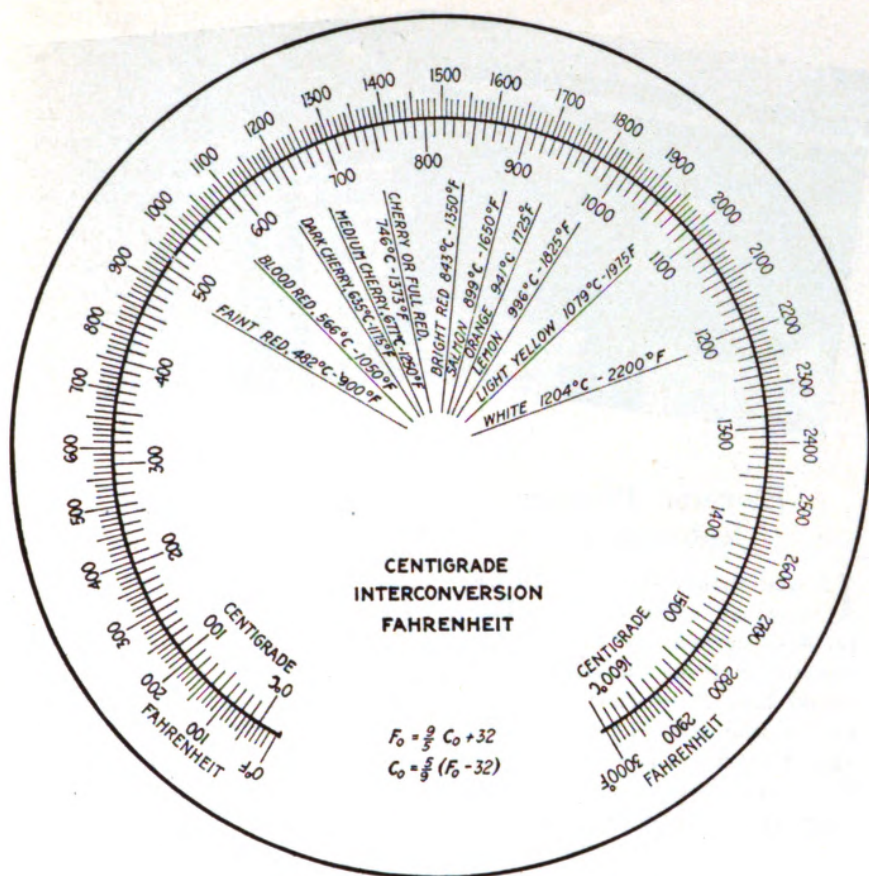
SOMETIMES one hears the expression "Little Old New York." But how old is New York? It is said to be 310 years old. We will not deny it, but Berlin is said to be 620 years old, while gay and festive Paris claims 1560 years. London does even better with its 1950 years. Rome has been looking from its hills over the world for 2670 years.

Let us not think of age or of being old, but just plan for to-morrow.

The Real Slaves

DURING the late snow-storms we read of the snow shovellers demanding and getting 75c. an hour. Last summer we were told time and again of the farm laborer getting his dollar an hour, and refusing work because of his wish to "go fishing."

But the Captains of Industry are not that independent. They are the real slaves, and, to quote Francis Bacon, "Men in great places are thrice servants: servants of the state, servants of fame and servants of business; so as they have no freedom, neither in their persons, nor in their actions, nor in their times. It is a strange desire to seek power and lose liberty."



Convenient Temperature Conversion Chart

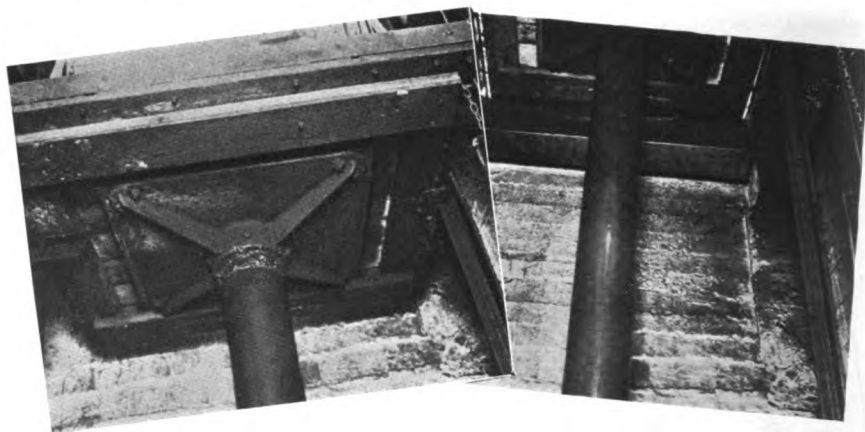
EVERY one admits he knows the conversion factors for temperatures, but with the above chart at hand mental effort is saved and mistakes of memory eliminated.

We are indebted to the Fansteel Products Company, Chicago, Illinois, and also *Chemical & Metallurgical Engineering* for the use of this chart. It was designed by the Fansteel Products Company and printed

in a recent issue of *Chemical & Metallurgical Engineering*.

The radial lines in the top half of the scale, giving the colors of metal opposite the corresponding temperature, are especially valuable to the practical furnace operator in controlling the heats.

The Fansteel Products Company uses this chart in their laboratories, furnace rooms and other places.



Elevator Plunger Lubrication

IF you should stand in the basement of the San Francisco Bulletin Building and look up the freight elevator shaft to the sidewalk, you would behold the view pictured in our illustration. The scenery is not very romantic, to be sure, but romance seldom is associated with the handling of freight. It is to men of practical minds that such a sight appeals.

What interests them is that before Dixon's Waterproof Graphite Grease was used the plunger was lubricated every day. Now it is lubricated once a month. No trouble has been experienced with the packing since using this grease, and the ram, as the photograph shows, is perfectly lubricated, even at the upper end.

Hundreds of plunger elevators in hotels and office buildings are protected by Dixon's Waterproof Graphite Grease because water cannot wash it off. The flake graphite in it

coats the plunger and packing so that operation is smooth and uninterrupted. Grease of this kind lubricates and requires but little attention. For the same reason it is used for lubricating hundreds of mine pumps that handle acid or alkaline water heavily charged with dirt. It effectually protects the packing and prevents scoring of the rods.

Melting Point of Alloys

THE melting point of alloys which melt at a low temperature may be found by tying a small wire to a piece of the alloy and suspending it in a pot of water which is gradually heated. A thermometer is kept in the water, and as the temperature rises the thermometer is watched until the alloy melts. This temperature is noted as the melting point.

As 212 degrees Fahr. is the limit to which water can be heated, paraffine wax is substituted for alloys which require a temperature above 212 degrees.—*Can. Foundryman*.

Painting Interior of Water Tanks, Standpipes, and Towers

THE David W. Pyle Company, of Lincoln, Nebraska, and Houston, Texas, is one of the best known concerns making a specialty of the protection of standpipes and other water works equipment, especially the interior of such structures.

The Pyle Company are emphatic in recommending to superintendents of water works that the inside of water tanks should positively be painted, if a paint can be found which is non-injurious to potable water.

We quote a paragraph from a circular sent out by the Pyle Company, covering the use by them of Dixon's Silica-Graphite Paint for the interior and exterior of water tanks, towers, and standpipes:

"Within the last 25 years we have made a specialty of painting standpipes, inside and outside. We consider it one of our greatest discoveries after many experiments along that line. We are now applying Dixon's Silica-Graphite Paint on the inside and outside of standpipes and find that it gives the longest service, has the best record for service in our mid-West country, and is the most enduring, indestructible, protective paint, harmless to water, that is manufactured.

"The painting of the inside of water towers is fully as important as, if not more important than, the painting of the exterior, for we have often known water towers, unprotected on the inside, to suddenly

burst or the bottom to drop out and we have numerous photographs of such records. The use of Dixon's Paint will obviate all this.

"Proper protective painting, by an experienced painter, using the best paint, will run the life of steel and iron tanks, from ten to fifteen years, up to a period of even one hundred years."

The literature gotten up by the D. W. Pyle Company gives numerous instances of standpipes in many sections of our mid-West country which had to be taken down after a service of ten or fifteen years, because they were not properly protected on the inside.

Fibre from Eucalyptus Tree

A PROCESS by which fibre of good quality can be manufactured from the bark of the eucalyptus tree consists in passing the bark through a "softening" machine to loosen out the fibres, and then through a specially adapting carding and spinning machine. The inventor of the process has opened a factory near Melbourne, Australia, where samples of twine, rope and bagging, for the manufacture of which the fibre is chiefly utilized, are exhibited. It is claimed that these goods are equal in quality to the best flax and Indian jute goods, and can be produced at half the cost. Waste fibre is employed for furniture stuffing, fibrous plaster work, placing refrigeration chambers, etc.—*Can. Machinery*.

◆

READY money is the kind that is ready to leave your pocket for the cash register of somebody else.—*McClary's Wireless*.



"H. P." is Getting Well!

SOME months ago, when we mentioned Mr. Herman Price in GRAPHITE, we were telling the world about his "beating the field" in the National Stationers' Golf Tournament. But again and again since then we have stopped to ask an anxious question, "How is Herman Price getting along?" For he has been wrestling with no playful antagonist at his home in Ridgewood these many days. Often the news was good, and we rejoiced; though oftener it was otherwise. But now at last the sun is shining through the clouds, and we know it is merely a matter of days when he will be well and stronger. And some day soon—perhaps about the time the robins commence to chirp on near-by lawns—he will be strong and vigorous enough to make his wonted morning dash for the 7.56, which—if the gods of the Erie be kind—brings him to his desk early and bright, ready for a good day's work. Speed the day!—so say we all of us.

Paint and Pottery

THE Paden City Pottery Company, Paden City, West Virginia, is one of the best known manufacturers of fireproof cooking ware.

Paint, Clay and Glass seem far apart, but the scientific fact is that clay presses and clay shop machinery of various kinds rust and scale unless protected with a first-class paint that will resist dampness, attrition, rust, and chemical attack of a severe degree.

That Dixon's Silica - Graphite Paint stands up under this service is attested in the following testimonial:

PADEN CITY POTTERY CO.,
Paden City, W. Va.

"We have used Dixon's Silica-Graphite Paint for a number of years for painting of our clay presses, and find it an excellent paint for the prevention of rust and scale on clay presses; in fact, any painting along the line of clay shop machinery. We recommend it to any one for this purpose."

Yours very truly,
PADEN CITY POTTERY CO.,
(Sd.) Thos. R. Davison, Supt.

Dixon's Silica-Graphite Paint is of course well suited and much used for the protection of smokestacks, engine and boiler room equipment, piping, and various kinds of metal and wood surfaces in pottery plants.



BIX: "I wonder why a Scotchman always says 'hae' for 'have'?"

DIX: "Possibly it's on account of his thrift. He saves a 'v' every time he does it."—*Boston Transcript*.

Atlantic Elevator "A"

THE cut on the cover of this month's issue illustrates, in a spirited manner, the immense Atlantic Elevator "A" of the Atlantic Elevator Company, a subsidiary of George C. Bagley & Co., Minneapolis, Minnesota.

In the foreground is a jet of escaping steam, which sweeps the whole side of the structure, causing dampness. Near by is a huge stack which pours forth smoke and gases, while alongside is a traction road which stirs up street dust. On the other side runs a railway.

Hot in summer, cold in winter, with great wear from sleet and snow, are the conditions. Added are the conditions of grain dust, coal dust, cinders, etc.

This structure was painted with Dixon's Silica-Graphite Paint in May, 1919. When an experienced manager like Mr. Fred Riebie, Secretary, decides on Dixon's, it is doubtless because Dixon's qualifies on the "lowest yearly economy" test.

Intelligent men like Mr. Riebie don't purchase merely on the "price per gallon." Money put into highest grade, long-wearing, dampness-resisting, protective paint, is a profit in the Labor and Material Account.

It pays owners to keep elevators in good condition so that they may stand a maximum of service in bringing down the H. C. L.



ONE pull doesn't make a haul, one punch a knockout, nor one push an open door.—*McClary's Wireless*.

Rule for Finding Length of Crossed Belts

FIRST find the length for the straight belt. Square each the diameter of the large pulley and distance between centers. Add together and extract square root of sum. Subtract from this the distance between centers. Multiply the remainder by two and add to length of straight belt as previously found. The result will be the length of crossed belt.

BELT SLIP

As a belt depends entirely on its power of adhesion to the pulleys to perform its function, see to it that its power of adhesion is maintained at the maximum by not overloading, and by the consistent use of suitable belt dressing, sparingly but regularly applied. Do not allow the dressing to clog on the pulleys. As belt slip is such an insidious danger—it makes no noise—and may be going on unsuspected until irretrievable damage has been done to the belt, begin the application of belt dressing immediately the belt is put in use.—*Can. Machinery*.

For the above nothing better can be recommended than the use of Dixon's Solid Belt Dressing. It may be applied while the belt is in motion and will immediately stop slipping. There are several good dressings on the market, but Dixon's Solid Belt Dressing has no superior. For preserving the life and pliability of heavy leather belts use Dixon's Paste Belt Dressing. Write for free Booklet No. 190-O, "The Proper Care of Belts."

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paints, etc. Sent free upon request.

Vol. XXII MARCH, 1920 No. 3

A Change in "GRAPHITE"

BEGINNING with this issue, March, 1920, GRAPHITE is composed of twenty-four pages, each measuring six inches wide by nine inches deep, instead of twelve pages measuring nine inches wide by twelve inches deep. This latter size has been used since the first issue, December, 1898. The number of pages at that time, however, was only four. Later they were increased to eight, and still later to twelve.

Doubtless our readers are greatly surprised at this change. We feel, however, that they will be better pleased by the change, as it will be our earnest endeavor to improve GRAPHITE editorially as well as mechanically.

The new size is more convenient to handle and we believe this is one of the most important things for us to consider. It can be slipped into one's pocket now much easier than the old one could be. In this way we are hoping that GRAPHITE will find its way home with our readers and there be kept.

The one thing which we regret is that this change could not have been made effective with the January, 1920, issue. Circumstances pre-

vented, however, and rather than delay for another year we believed that the benefits to our readers and ourselves would justify the change at this time. In this connection we wish to mention that the January and February, 1920, issues will be bound with those of 1919.

We will be glad, indeed, to receive any comments our readers may wish to make concerning this change. If you like it, tell us, for that is the only way we will ever know. If you do not like it, tell us that also. Perhaps we can persuade you that, after all, it is the best thing to have done.

Departments

DEPARTMENTS in a house organ do not make for satisfactory reading generally, any more than they do in a newspaper. Therefore we intend to abandon special numbers, or issues, of GRAPHITE and illustrate, describe and tell of the various Dixon products as we go along through the year.

In that way we will even up matters and, we believe, it will make more general and interesting reading.

Perhaps few of the readers of GRAPHITE know that the circulation of our little publication extends to every civilized part of the world and that each month we receive some form of communication from interested readers; sometimes it is a letter from a customer who has been reminded; sometimes an inquiry, and again a pleasant letter of approval.

Through GRAPHITE we feel that we are in touch with our many friends in all lands and we are proud and grateful.

Demand and Supply

A LOOK AHEAD BY THE AMERICAN NATIONAL BANK OF SAN FRANCISCO.

WITH the momentum of record-breaking 1919 behind it, the new year starts auspiciously, with business plunging ahead in tremendous volume. Buyers are clamoring for goods to satisfy the insistent demands of their customers, and in many trades orders are being placed months ahead, prices being a secondary consideration. In ordinary times high prices would bring their own cure in a reduced demand for commodities, but in the present condition of world-scarcity, everything vendable is snapped up by eager buyers, and shortages are everywhere reported.

If dollars are the true measure of prosperity the country certainly is prosperous. Disquieting reflections on the fact that lack of production is responsible for the scarcity and the high prices seem to find no place in the mind of the average citizen, who is chiefly intent on the dollars, regardless of the diminishing value of these dollars when exchanged for more desirable things. It is estimated that the actual physical volume of trade in 1919, that is, the number of pounds or yards or dozens of goods created and moved to market, is only 8 per cent. greater than in 1913. As the number of buyers has assuredly increased more than 8 per cent., and the numbers of dollars available to buy with has more than doubled, it is obvious that the average individual is getting a smaller share and paying more for it than ever before.

Since this condition of affairs cannot go on indefinitely, it is a fair guess that some sort of reaction will ensue in 1920 and prices will gradually recede from their present level. This conclusion is based in part upon the indication of a decline in exports to Europe, whose eagerness to get hold of our foodstuffs and raw materials has been a material factor in keeping prices up. Each decline in foreign exchange here—which is merely the converse of a rise in American exchange abroad—makes it harder for the European buyer to finance his purchases in America, with the result that buying of our products must be reduced to the supplying of sheer necessities.

Both wholesale and retail trade in the Coast cities is excellent, notwithstanding high prices, strikes and all other unfavorable elements. Real estate is changing hands frequently, at advancing prices, and building construction is of unusual volume.

So far as the Pacific Coast is concerned, the retrospect of 1919 is comforting and the outlook for 1920 full of cheer. While rain is urgently needed in California, to preserve the ranges and ensure an adequate water supply for the summer season, no serious injury has yet resulted from the drouth, and two months are still ahead when rain may be looked for. The Cannerymen's League of California has published figures showing that 13,696,403 cases of fruit were packed in this State last year, as compared with 8,943,737 cases in 1918. The greatest increases were in peaches and apricots, which accounted for about five-sixths of the total figures.

"The Eagle News"

THE above is the title of a new-comer to the goodly field of house organs. It is published by the Eagle Pencil Company, New York. The first issue is dedicated to the memory of Mr. Samuel Kraus, the late Vice-President of the Eagle Pencil Company.

Mr. Kraus was in his 69th year and, although suffering ill health for the past year, he attended business up to within five weeks of his death. He had been connected with the Eagle Pencil Company and its predecessors for a great many years, having entered their employ at the age of fourteen years. Through unremitting attention and unquestioned ability he became Superintendent of the factory and later Vice-President, in charge of all the manufacturing departments. He was admired and respected by his associates for his many splendid attributes, and it was very fitting that the first issue of *The Eagle News* should have been dedicated to him.

The Eagle News is published by and for the employees of the Eagle Pencil Company. The idea back of it is that of providing a means of expression between the managers and the employees, as well as a medium to foster and encourage the expression of the ideas of the individual worker, and to promote a better fellowship and departmental co-operation.

Each employee is asked to consider himself or herself an important member of its staff and to feel responsible for the success of the publication and of the company.

The employees are asked to contribute freely articles of happenings in their departments and to give suggestions of how and in what manner *The Eagle News* can best perform its mission.

The Eagle Pencil Company has an Employment Department and seeks to have its employees understand that they are not hired by the week, or the month or the year, but for life, and that they are to consider themselves a part of the organization, and that the success of the company depends upon co-operation and co-interest.

As GRAPHITE is one of the oldest, if not the oldest house organ in the United States and one that has never missed an issue, it is quite in order that we should be the one to welcome *The Eagle News* to the field of house organs.

Predictions Come True

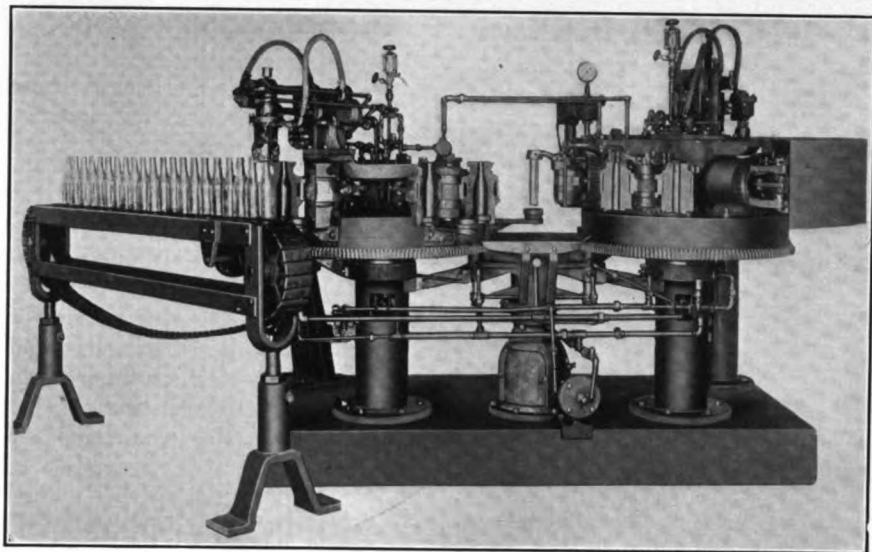
IN the Nov.-Dec., 1919, issue of GRAPHITE, we made the statement that the men at the Dixon mine located at Graphite, New York, were predicting a hard winter.

They predicted that it would be the hardest winter in ten years, that snow and cold would come early and stay late. Excepting the staying late, all the predictions so far have come true and the winter may really yet decide to stay late.

Word comes to us that the thermometer has been 35° to 40° below zero and that one woman while getting breakfast had her toes frozen.

◆

"NOTHING except the Mint can make money without advertising."—*Gladstone*.



Blowing Bottles by Machines

SEVERAL months ago comment was made in GRAPHITE about the satisfaction obtained when the shears of glass bottle blowing machines are lubricated with Dixon's Waterproof Graphite Grease. The shears cut off slugs of white-hot glass paste for the blowers, and when they are not in the heating portion of the furnace cold water runs over them to keep them cool. Dixon's Waterproof Grease seems to remain on the shears longer than any other lubricant under the extremely trying conditions of water and high temperature.

Another Dixon Grease has proved to be the best lubricant for the molds in which the bottles are formed. It is No. 677. Ordinarily customers make a mixture of one part No. 677 to two or three parts of light mineral oil and apply it to molds with a swab.

The object is to prevent the plungers sticking and marking the ware. At first a mold should be swabbed frequently until about 100 bottles have been blown. By that time sufficient graphite will have become attached to the walls, so that thereafter about 40 bottles may be blown between swabbings.

The plants in which this practice is followed speak highly of Dixon's No. 677, because it produces clean ware with a good polish, and eliminates loss of time for cleaning molds. The machines are "always blowing bottles."

Our illustration shows a typical blower with the molds open. It is the "No-Boy" Bottle Machine, made by the Lynch Glass Machinery Company, Anderson, Indiana.

Other machines differ somewhat in design, but the essential principles are the same.

"The Guide Post"



IN February GRAPHITE, the Guide Post pointed out to Executives and Office Workers the way to ease and quicken their pencil work by indicating the proper degrees of hardness and softness of Dixon's ELDORADO

for various kinds of office employment.

This month the Guide Post shows the way of efficiency in the use of Dixon's ELDORADO—"the master drawing pencil"—to Professional Men, Salesmen and Writers, as follows:

PROFESSIONAL MEN:

Work which requires much writing, such as briefs, lectures and speeches, demands a lead which glides evenly and smoothly over the paper, in a way to accelerate rather than to interrupt the flow of thought. We recommend 3B (very soft); 2B (soft); or B (soft and firm).

For notes, figuring, writing prescriptions, we recommend HB (medium); F (firm); and H (hard).

SALESMEN:

Salesmen require a lead that will make a heavy enough mark without smudging, and which, at the

same time, will write quickly and easily.

We recommend HB or F where no carbon copy is taken; and 2H for manifold order books.

WRITERS:

Reporters, Editors, Advertising Men and Authors are discriminating and hard-to-please users of pencils. Any one of a number of degrees of hardness, ranging from 6B (softest) to B (soft), according to the use and habit of the hand, should be considered by writer folk.

N. B. It is well to remember that in all of the above advice we have in mind just one pencil, and that Dixon's ELDORADO—"the master drawing pencil"—which is made in 17 leads to cover all needs and preferences.

Squibs

THE lawyer was cross-examining a witness to a robbery. "When did the robbery take place?" he asked.

"I think—" began the witness.

"We don't care what you think, sir. We want to know what you know."

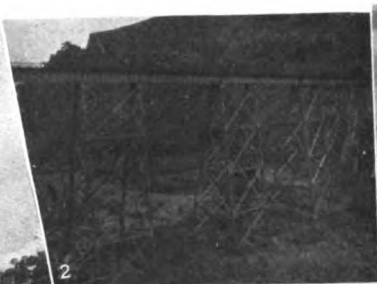
"Then if you don't want to know what I think, I may as well leave the stand. I can't talk without thinking. I'm no lawyer."

"Is your wife one of those women who look at their husbands and say, 'I made a man of him'?" asked the impertinent friend.

"No," answered Mr. Meekton. "My Henrietta is very unassuming. She merely says she has done her best."



Pahala Plantation,
Pahala, H. I.



4

Hakalau Bridge,
Hilo Cons. Ry.



Waialua Agricultural
Co., Waialua,
Oahu, T. H.

Olaa Sugar Co.,
Olaa, Hawaii

Sugar!

THE above illustrations show sugar plantations, mill buildings, smokestacks, and a bridge in the Hawaiian Islands on which Dixon's Silica-Graphite Paint has been used for protective purposes.

Sugar is King, particularly in these days of sugar shortage and high prices. Dixon's Silica-Graphite Paint is the King's protector so far as his railways, plantations, etc., are concerned.

It is particularly interesting to know that Hakalau Bridge shown above is 750 feet long and 190 feet high. It is a part of the Hilo Consolidated Railway which follows the East Coast of Hawaii from Kaueleau to Hamakua.

There appeared some time ago in GRAPHITE an illustration of the

Gulch Bridge of the Hilo Railroad which is also protected by Dixon's Paint.

The Hawaiian Electric Co. of Honolulu are also users of Dixon's Silica-Graphite Paint.

The climatic conditions to be encountered in the Hawaiian Islands are extremely severe on paint.

Dixon's Silica-Graphite Paint has been chosen for the protection of these bridges and buildings in Hawaii because of its record as the best protector of metal under such conditions of climate.

In addition to the above plantations, Dixon's Paint is also used on the following Hawaiian plantations, details of which we have previously mentioned in GRAPHITE:

Paauhau Sugar Company, Paauhau.

Is "Jack" Lewis a Wit?

MR. J. H. LEWIS is District Representative of the Atlanta Sales Office of the Joseph Dixon Crucible Company.

The Paint Department, having occasion to compliment Mr. Lewis on his yearly sales, was indiscreet but honest enough to say: "Not everybody can be a medal man, but you are one of them." We let it go at that and took up the order of the day: "Next,"—possibly thinking Mr. Lewis would be satisfied with our diplomacy and so forth. Here is what he said in reply, and if "Jack" Lewis is not a wit, who is?

"The only disappointing feature of your letter is that I did not receive the medal. We looked very carefully through the mail and about decided that you had either neglected to enclose it or it was lost in transit.

"It might be very much like a story I heard a few days ago regarding a visit the Queen of Roumania made to General Pershing and his staff. Before leaving her home town she loaded herself down with a satchel full of medals, of course expecting to decorate General Pershing and his staff. In compliment to the Queen, General Pershing sent his world-famous band to meet her, and she was so much pleased with the band that she decorated each of the musicians, leaving General Pershing and his headquarters staff out."

◆

FIRST LAWYER: "Did his speech carry conviction?"

SECOND LAWYER: "It did. His client got five years."

Plants in Foreign Lands

SOME time ago Roger Babson made a suggestion that American business should take its factories to countries where labor is cheaper and materials plentiful. There is a man who does not agree with Mr. Babson, even though Mr. Babson is a well-known statistician. That man says, among other remarks: "The assumption that cheap labor is necessary to permit American manufacturers to produce at a cost which would make competition with foreign made goods possible has been definitely and frequently disproved.

"Compare a Ford car and its price with anything available in England."

He also says: "As far back as 1910 I heard a Grand Rapids furniture man laugh to scorn the suggestion that the primitive methods of the Holland furniture makers would permit them to begin to compete with the production of his highly paid artisans with their modern machinery.

"The biggest fallacy on earth is that a low wage scale implies a low unit cost, and the manufacturers that have seen that it is the unit cost and not the wages that really counts—and they are many—are the leaders in their industries."

Profits

WITH pencil he could figure out
A profit raising chickens;
Pencil after pencil the good old scout
Went ciphering like the dickens.

But, oh! the schemes of men and mice,
The slip 'twixt lip and cup,
The doggone pencils rose in price,
And ate his profits up!

Niulii Plantation Co., Kohala.
 Honolulu Plantation Co., Aiea.
 Kohala Sugar Co., Kohala.
 Hawi Mill & Plantation Co.,
 Hawi.

Hutchinson Sugar Co., Homāpu.
 McBryde Sugar Co., Eleele.
 Kauai Fruit & Sand Co., Ltd.,
 Homestead.

Kealeku Sugar Co., Kealeku.
 Koloa Sugar Co., Koloa.



Flagpole, Rentschler Building, Hamilton, O.

THE above flagpole, according to information furnished us by Steeplejack G. C. Winders, of Cambridge City, Indiana, is painted every five years with Dixon's Silica-Graphite Paint. Mr. Winders is shown in the photograph.

If any of the readers of GRAPHITE are considering painting this Spring, it will pay them to communicate with the Paint Department regarding their Spring paint requirements.

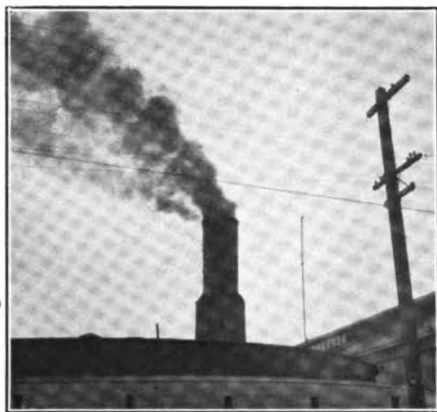


"THEN we're engaged?"

"Of course."

"And I am the first girl you ever loved?"

"No, dear, but I'm harder to suit now than I used to be."



Pacific Gas & Electric Company's Plant, San Francisco, Calif.

THE above illustration shows part of the plant of the Sierra-San Francisco Power Company, which is under lease to the Pacific Gas & Electric Company.

The smokestack was painted over a year ago with Dixon's Silica-Graphite Paint, and is in good condition now, despite fogs, salt air, dampness, daily changes in temperature, strong breezes, etc.

Dixon's Paint is much used in similar plants of this and other companies along the Pacific Coast. It is a service paint as contrasted with a "lower price per gallon paint."

Real economy men buy on service and testimony.



GUIDE: "Would m'sieu' like to see one of the robbers' strongholds, of which there are several in the neighborhood?"

TOURIST: "No, thanks. We're fixed up at a hotel already."



YOU know how gratifying it is to draw on paper which is sympathetic. You will find the same sort of friendly helpfulness in Dixon's Eldorado.

Smoothly gliding over the paper, responsive to every shade of meaning, to every tone, to every technique, it is the finest pencil your hand could wish for.

You will always be glad you remembered—

**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY

Pencil Dept.

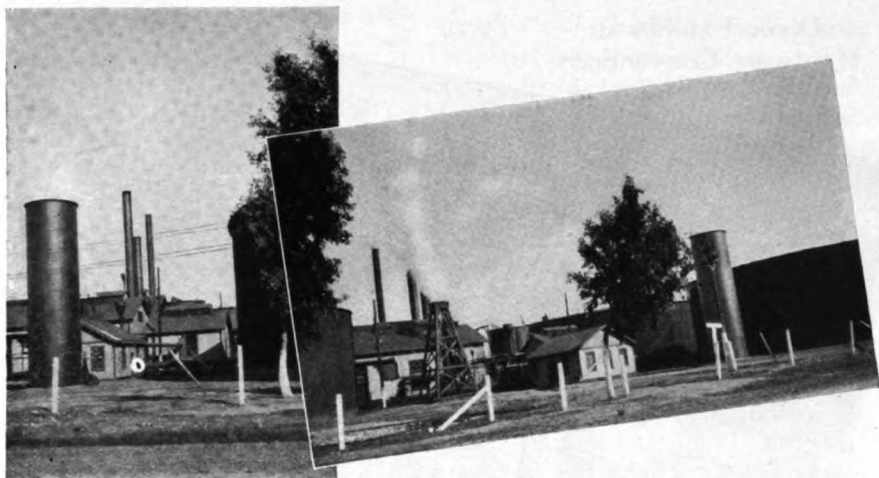
Jersey City, N. J.

Canadian Distributors: A. R. MacDougall & Co., Ltd., Toronto



SAMPLE OFFER

Dixon's Eldorado is made in 17 leads—one for every need or preference. Tell us the work you do, and we will mail you full-length free samples of your favorite leads. Also write for interesting pencil booklet—"FINDING YOUR PENCIL."



"The Capitol"

By Earl Horter

ON the opposite page is shown a reduced reproduction of one of the series of remarkable "ELDORADO" advertisements appearing on full pages in *International Studio*, *American Architect*, *Architectural Record*, *Architecture*, and *Architectural Forum*. Concerning this series we have the unsolicited opinion of advertising experts that it strikes a new note in lead pencil advertising. Quoting verbatim one of these, it will be seen how effective this series is: "Congratulations on this series; they are a real achievement in pencil advertising."

All of which is in substantiation of our statement that there is no advertising campaign on a similar article to compare in scope and power with the present "ELDORADO" campaign, which Dixon salesmen and others may note with satisfaction.

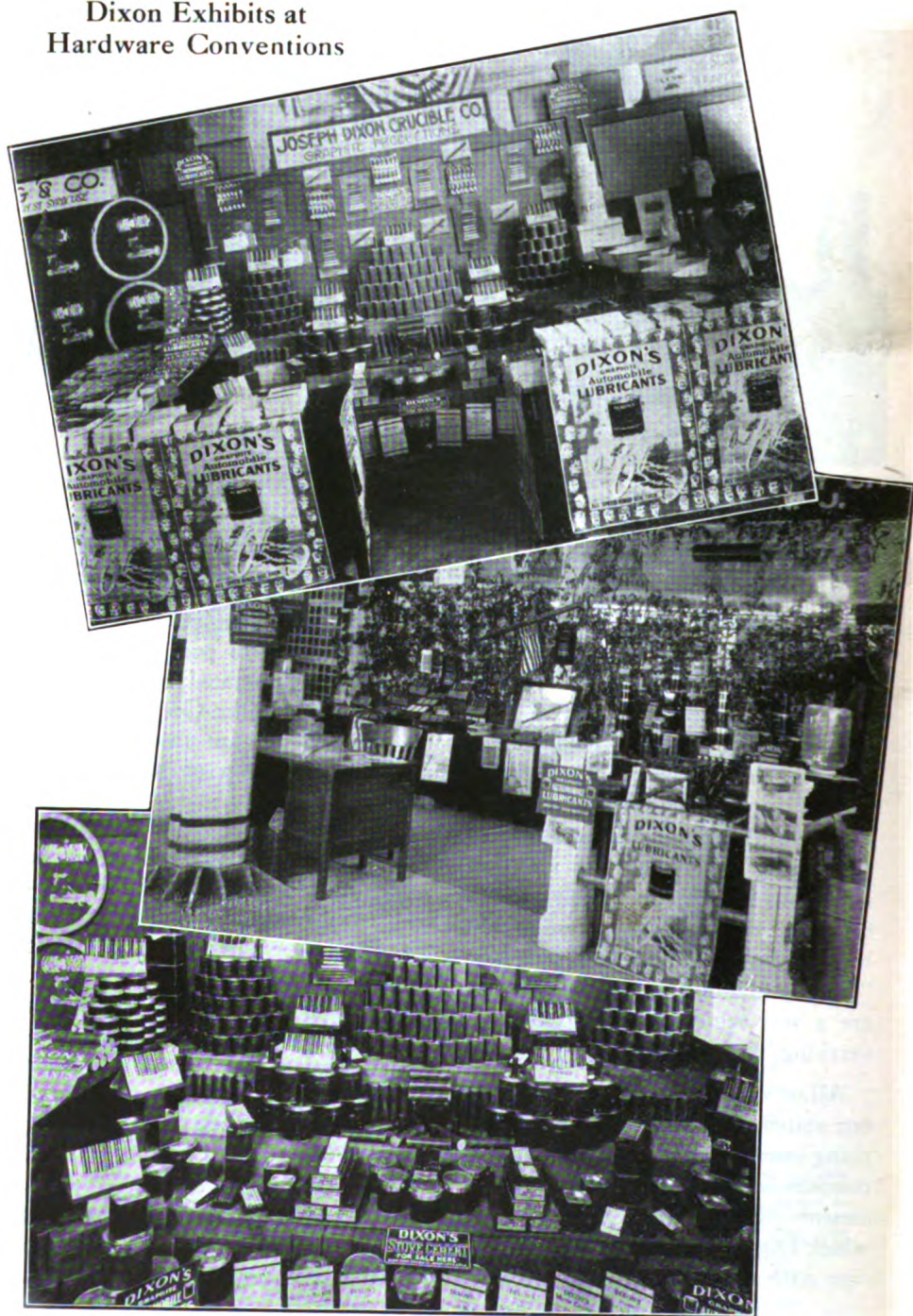
Tracy Pumping Station, Associated Pipe Line, Tracy, Calif.

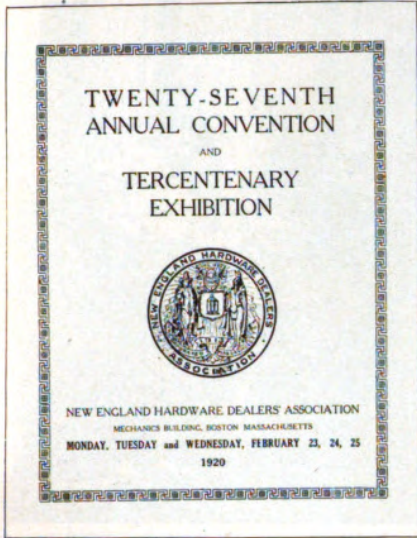
THE holder, tanks, pipes leading from tanks to pump house, and smokestacks illustrated, are protected with Dixon's Silica-Graphite Paint. Their spick-and-span appearance carries its own lesson of neatness and service.

Efficiently managed companies like the Associated Pipe Line do not accept Rust to-day and hope for Drop-in-Prices to-morrow. Sufficient unto the day is the duty thereof. Paint to-day and escape Rust to-morrow. Rust costs more than paint. Prices will not drop before rust and deterioration arrive. Do not waste labor through using a "cheaper per gallon" paint. Use the best, longest-lived, most reliably tested paint.

Dixon's Silica-Graphite Paint has been made for over 50 years in FIRST QUALITY only, and the best managed companies rely on it.

Dixon Exhibits at Hardware Conventions





Hardware Conventions

THE month of February was a very busy one in the East for the Hardware people, who gathered together from Maine to Maryland in three great conventions—at Boston on February 23d, 24th and 25th; at Philadelphia on February 10th, 11th, 12th and 13th, and at Syracuse, N. Y., on February 17th, 18th, 19th and 20th.

The Boston meeting was a special affair, being held in honor of the Tercentenary of the landing of the *Mayflower* Pilgrims in 1620. Our Mr. Guy Hart was on hand representing the Dixon pencil interests. He writes that it was a splendid convention. We show above a reduced reproduction of the cover of the program.

At Philadelphia the convention of the Pennsylvania and Atlantic Seaboard Hardware Association brought

together many hardware dealers and jobbers and manufacturers. The Dixon booth, they tell us, was rated very high in attractive quality by those attending. Mr. H. Jackson looked after the Dixon pencil interests and Mr. J. M. Willitts after the grease and graphite interests at the convention.

The Syracuse convention saw Mr. J. L. Levison in charge for the pencil interests and Mr. D. Thurston for lubricants. A mighty attractive display was arranged, as is shown by the illustration on the opposite page. This illustration also includes the booth at Philadelphia.

The Real Salesman

ONE who has a steady eye, a steady nerve, a steady tongue, and steady habits.

One who understands men and who can make himself understood by men.

One who turns up with a smile and still smiles if he is turned down.

One who strives to out-think the buyer rather than to out-talk him.

One who is silent when he has nothing to say and also when the buyer has something to say.

One who takes a firm interest in his firm's interests.

One who keeps his word, his temper, and his friends.

One who wins respect by being respectable and respectful.

One who can be courteous in the face of discourtesy.

One who has self-confidence but does not show it.

One who is loved by his fellow-men.

—*The Salt Seller.*



**Presbyterian Church,
Franklin, Indiana**

THIS steeple is painted by Steeplejack G. C. Winders, Cambridge City, Ind., every five years with Dixon's Silica-Graphite Paint.

Mr. Winders is one of the best known steeplejacks in the West and he stakes his reputation on the economical service of Dixon's Silica-Graphite Paint. He is one of those conscientious and efficient contractors who recommend to owners the final economy to be gained by using a first-class paint instead of a "cheaper per gallon" paint which gives "cheaper" service.

HE: "I have your permission to call this evening?"

SHE: "I shall be very pleased; but don't forget that father switches off the light at ten o'clock."

HE: "That's kind of you. I'll be there at ten sharp."



**Smokestack, Hoosier
Manufacturing Co.,
Newcastle, Ind.**

THIS smokestack is painted every five years with Dixon's Silica-Graphite Paint, a remarkably economical service.

The painter in the photograph is Steeplejack G. C. Winders, of Cambridge City, Ind. He also was the painter of the smokestack of the Indianapolis & Cincinnati Traction Company of Rushville, Indiana, illustrated in the January issue of GRAPHITE.

◆

LAWYER: "Have you ever been in jail?"

WITNESS: "Yes, sir, once."

LAWYER (*triumphantly*): "Ah! For how long?"

WITNESS: "Long enough to whitewash a cell which was to be occupied by a lawyer who cheated one of his clients."

Business is Business

BY BERTON BRALEY

(Reprinted from *The Nation's Business*)

"**B**USINESS is Business," the Little Man said,
 "A battle where 'everything goes,'
 Where the only gospel is 'get ahead,'
 And never spare friends or foes;
 'Slay or be slain,' is the slogan cold,
 You must struggle and slash and tear,
 For Business is Business, a fight for gold,
 Where all that you do is fair!"

"Business is Business," the Big Man said,
 "A battle to make of earth
 A place to yield us more wine and bread,
 More pleasure and joy and mirth;
 There are still some bandits and buccaneers
 Who are jungle-bred beasts of trade,
 But their number dwindles with passing years
 And dead is the code they made!"

"Business is Business," the Big Man said,
 "But it's something that's more, far more;
 For it makes sweet gardens of deserts dead,
 And cities it built now roar
 Where once the deer and the gray wolf ran
 From the pioneer's swift advance;
 Business is Magic that toils for man,
 Business is True Romance.

"And those who make it a ruthless fight
 Have only themselves to blame
 If they feel no whit of the keen delight
 In playing the Bigger Game,
 The game that calls on the heart and head,
 The best of man's strength and nerve;
 Business is Business," the Big Man said,
 "And that Business is to SERVE!"



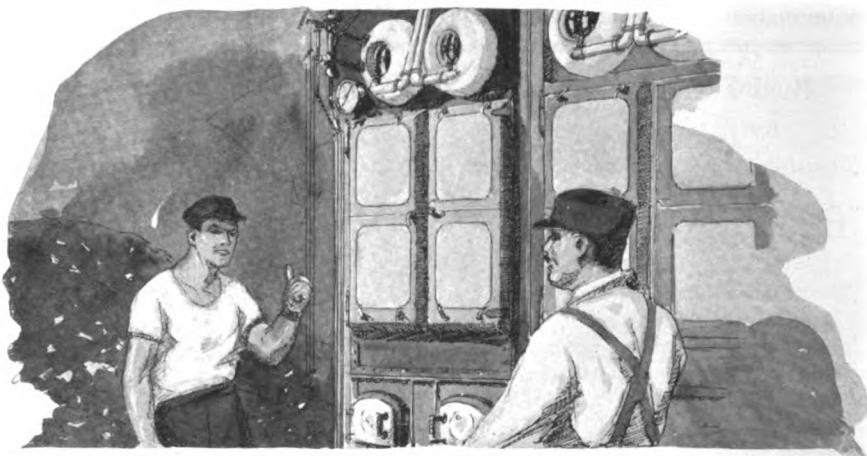
Pumping Station, Shell Oil Co., Tracy, Calif.

DIXON'S Silica-Graphite Paint was applied to the above structure three years ago, and it is still in good condition.

This station is one of nine on the pipe line leading from the Coalinga oil fields to the Martinez refinery, which also uses Dixon's Paint.

Dixon's Silica-Graphite Paint is worth more per gallon, because it lasts more years. Even if it lasted only a few months more it would be worth a higher price. It does not pay to waste high-priced labor in applying a "cheaper per gallon" paint. It is astonishing to find that three-quarters of mankind buy by initial price instead of long service. This is world waste, based on unintelligence or carelessness.

Let's all advance education in what is final economy.



“getting more steam with less coal”

DIXON'S Pioneer BOILER GRAPHITE

“Just look at that steam-gauge. There is no better way of making coal produce more steam than by keeping the boilers clean and free from scale—and the best way to do that is by using Dixon's Pioneer Boiler Graphite.

“I did not believe it until I tried it, but now I *know*.”

***Write for Booklet No. 190-T
and other information.***

Joseph Dixon Crucible Co.
Jersey City New Jersey



Established 1827



We also make

- ☐ Cup Grease
- ☐ Joint Compound
- ☐ Silica-Graphite Paint
- ☐ Waterproof Grease
- ☐ Flake Graphite
- ☐ Motor Brushes
- ☐ Solid Belt Dressing
- ☐ Paste Belt Dressing
- ☐ Boiler Graphite

Write for catalog Mark X in square

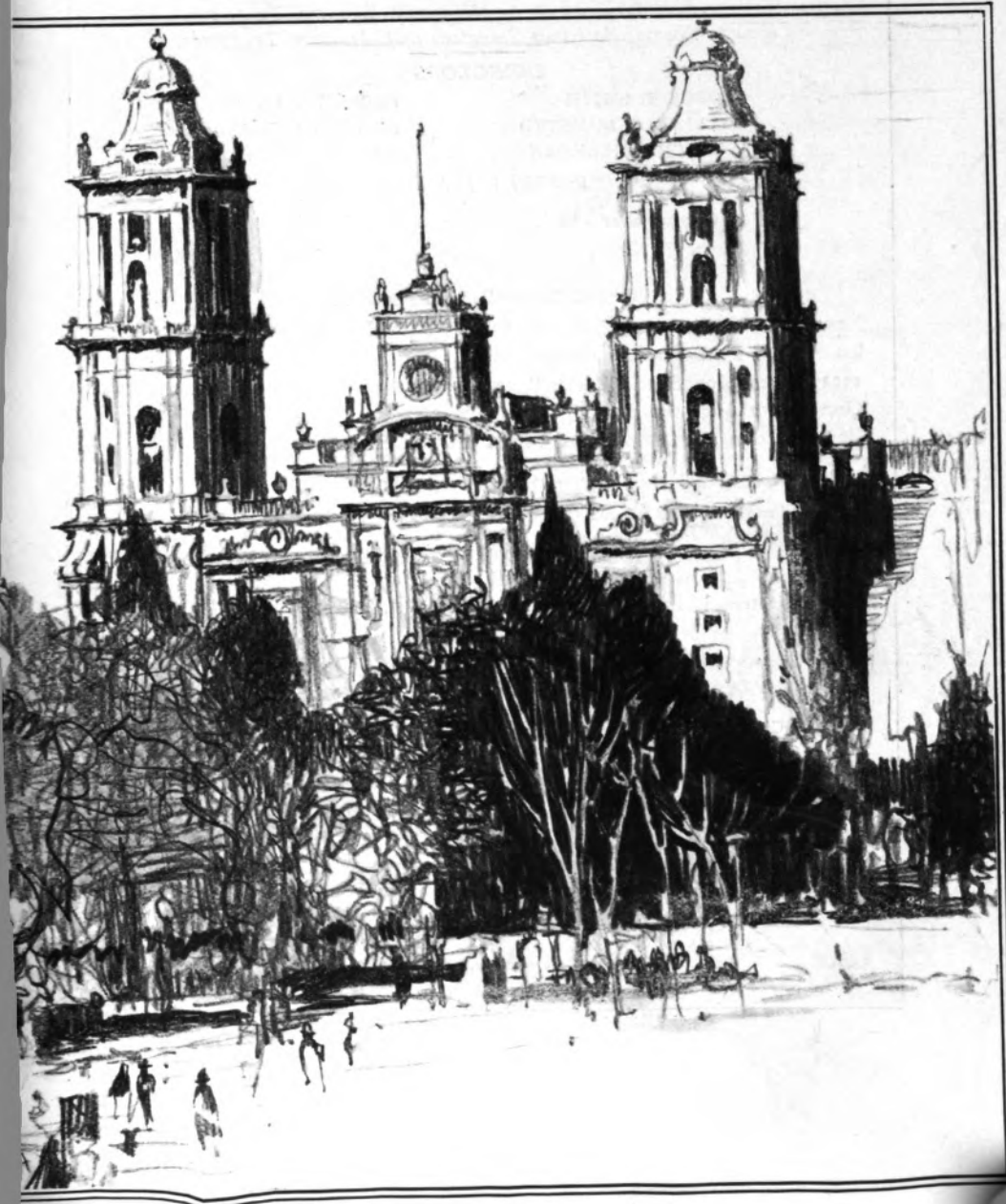
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Graphite

VOL. XXII

APRIL, 1920

No. 4



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



**Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead**



OFFICERS

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Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

APRIL, 1920

Number 4

Safety in Boiler Rooms

1. Make it a rule that firemen or water tenders shall not indulge in lengthy conversations, as such cause them to forget their duties.

2. Chains attached to quick-closing gage-glass valves should be of such length that firemen must reach above their heads to pull them out. On one occasion a man was observed in the act of pulling the valves shut while talking to the fireman. He unconsciously had used the chain as a rest.

3. Impress upon firemen and water tenders that they must blow water columns when coming on duty. This old rule is too often disregarded in large plants.

4. Boiler cleaners and repairmen should be given strict orders that they must never enter a boiler without first telling the fireman in charge and seeing to it that blowoff valves and feed valves are shut tight.

5. When boilers are dropped for cleaning and repairs, both steam-nozzle valves should be closed tight. Plug valves on feed-water lines should also be closed, as firemen or water tenders have opened the feed valve on dead boilers by mistake.

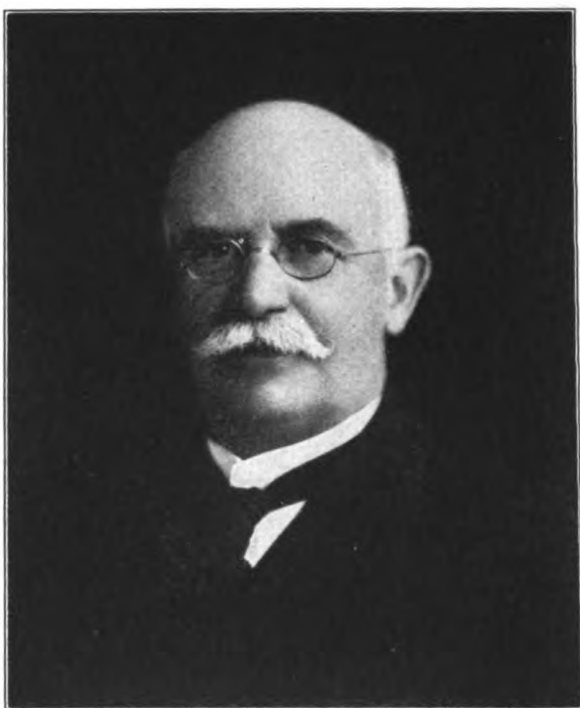
6. Provide stationary steel ladders on both sides of all boilers, preferably one at the front and one at the back. Exit to the boiler house roof should also be provided.

7. Never permit ash handlers to crawl into ashpits. If the design used makes this necessary, change the design. Conveyors adapted to the layout usually save the first cost in the first year.

8. Boiler room basements in large plants should be provided with several avenues of escape in case a tube or a steam pipe should burst. The men should be taught to use all exits.

9. Stairways should be properly illuminated, so as to prevent stumbling. Electric hand lanterns should be hung at suitable locations for use when the lights go out. Large sizes should be provided so that employees will not take them home.

10. Doors to furnaces should be provided with safety automatic latches. This should be applied to underfeed stoker doors, as men have been painfully burned while dumping fires. Neglecting to close damper in duct to overfeed element will cause this.—*Ax-I-Dent-Ax*.



"And on the table before him they placed a vase,
in which were seventy roses, and a great birth-
day cake, on which a like number of candles
nodded their congratulations to him."

Roses and Candles

*To Mr. George E. Long, Vice-President,
on his seventieth birthday*

Roses to perfume,
Candles to illuminate,
And all blossoming,
And glowing,
In the midst of friendly
faces,
Seventy years to celebrate.

But nor lovely roses,
Nor flaming candles,
Can equal in perfume,
Or brightness,
The good wishes of friendly
faces.

Dixon's A.E.S. Eureka Crucible

IN Dixon's A. E. S. Eureka crucible we seem to have struck a mixture, and a mixture that promises the most satisfactory, if not the most wonderful, results among brass founders.

One salesman reports that a foundry in his territory ran Dixon No. 18 Eureka crucibles on an average of 60 heats each and an average of 40 heats on Dixon's No. 635 Eureka. This result was better than anything he had received from crucibles in five years.

Another salesman in another territory advises us that a customer "took 126 heats from a Dixon No. 18 crucible."

Still a third salesman reports that a Pennsylvania foundry secured an average of 45 heats on Dixon's No. 20 A. E. S. Eureka crucibles, and he adds, "Eureka A. E. S. seems to have hit the bull's-eye."

The life of a crucible, no matter by whom made, is very like that of a child—it depends upon the care that is given it rather than upon the fact that it starts out in the world all right.

A graphite crucible will absorb moisture as readily as a sponge, and when in that condition it is placed in the fire it is more than liable to "scalp."

When you consider that a crucible is subjected to a heat of nearly 3000° Fahrenheit, and when you remember that it is composed of clay and graphite, and when you remember still further that all solids, such as iron and steel and brass, liquefy under that

heat, you need not wonder that a graphite crucible softens and when grabbed with a pair of tongs by a husky foundryman is liable to be crushed if the tongs do not fit or if the foundryman bumps the crucible in removing it from the pit.

The Removal of Paint from Iron and Steel Surfaces

SCRAPING or burning paint from the surface of iron and steel structures previous to the application of a new coat is a slow and laborious process. An easier and more rapid way of doing this work is the method used by the United States Coast Artillery, for cleaning the exterior portions of the big guns and gun carriages in their care.

In practice, a one pound can of concentrated lye is dissolved in three quarts of boiling water, and to this mixture sufficient lime is added to emulsify the solution. This solution is freshly mixed each time it is to be used and is applied with a brush and allowed to remain until it is almost dry. It is then removed and unless the paint is very old and thick it will come off with it. If one application of the mixture does not remove all of the paint, the surfaces are washed off and a second coating applied. Before a new coat of paint is put on, the surface of the metal should be thoroughly cleansed with a solution of washing soda (in the proportion of one-half pound to two gallons of hot water), and well dried either by wiping with soft cloths or by the application of heat.

—*Can. Machinery.*



Keeps Them Quiet

No grinding, squeaking, grumbling gears when you're using Dixon's. It's the one lubricant you can depend on to keep them quiet.

Dixon's obliterates the roughness that exists on all gear and bearing surfaces. It works into those tiny depressions and builds up a smooth, oily veneer that successfully wards off friction.

DIXON'S GRAPHITE Transmission and Differential LUBRICANT

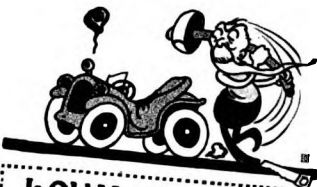
Dixon's 877 is unequalled for transmission and differential. Also try Dixon's Famous Cap Grease and other Dixon Lubricants. All in handy tins.

With your transmission and differential running in Dixon's, you can rest assured your gears are friction-free. For Dixon's doesn't "squeeze out" under pressure. Nor is it affected by heat or cold like plain oil and grease.

Your around it means smoother, sweeter action—less noise—more power—and it helps keep down gas and repair bills.

Try it and see. Your dealer has it.

JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, New Jersey
Established 1827



Is Old Man Friction At Work on Your Car?

He's a destructive old cuss, is Friction. Once he gets in his work, you're up against excessive wear, noise and trouble. Not to mention growing costs! That's why it's so important that you use Dixon's Lubricant.

DIXON'S GRAPHITE Transmission and Differential LUBRICANT

Ask for Dixon's 877. Also, the famous Dixon's Cap Grease and other Dixon Lubricants. They all come in handy tin cans.

Friction hasn't a chance with Dixon's on the job. In fact, the heavier the pressure Dixon's you'll always find on gear and bearing surfaces. It can't "squeeze out." So you get a permanent, smooth, slippery film that sweetens up the action of your car, lengthens its life and cuts down noise and expense.

And here's another important advantage. Dixon's is not affected by heat or cold like plain grease or oil.

Your dealer will tell you why Dixon's Lubricant is best for your car. Ask him.

JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, New Jersey
Established 1827



Keep Your Gears Young

Your car is as old as its gears. For worn gears will rob any car of its youthful pep and power.

Dixon's helps to postpone the day when your car just drags itself along and you have to turn it in for a small allowance.

DIXON'S GRAPHITE Transmission and Differential LUBRICANT

When you put Dixon's into your differential and transmission cases, you give your gears a smooth, velvety, wear-resisting film of lubricant that positively prevents friction. And it stays put! No "squeezing out" under pressure! No breaking up under heat or congealing in cold weather!

Once you use Dixon's you'll become a Dixon fan, like hundreds of thousands of other motorists, because—
—it saves gasoline—reduces upkeep—prevents excessive wear—cuts down noise—makes smoother, easier, faster miles.

See what your dealer says about Dixon's. He has it for you. Dixon's 877 for differential and transmission. Also Dixon's Cap Grease and other famous Dixon Lubricants.

JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, N. J.
Established 1827



Not Affected By Heat or Cold

The thermometer means nothing to Dixon's. Heat does not break it up. Cold does not congeal it.

Dixon's puts between your gears a protecting film of smooth, velvety lubricant that works to perfection, year 'round, in any climate. This is one reason why it is better than plain grease and oil.

DIXON'S GRAPHITE Transmission and Differential LUBRICANT

Here's another. The greater the load, the more effective Dixon's becomes. Pressure merely forces it more firmly into the minute irregularities on your gear and bearing surfaces. Dixon's builds up a lasting film lubricant that keeps your gears quiet and friction-free. The result is simple arithmetic. Add a lot to your power, mileage and general satisfaction. Subtract from your operating costs. You know the answer. You're right.

Your dealer can supply you with Dixon's.
JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, New Jersey
Established 1827

Dixon's 877 for transmission and differential. Also the famous Dixon's Cap Grease and other Dixon Lubricants. They all come in handy tin cans.

Advertising Dixon's Gear Lubricants

ON the opposite page are small reproductions of four of a series of advertisements which will be used during 1920 to tell the story of Dixon's Automobile Lubricants.

Beginning early in April and continuing for over two months, this series will appear in a list of newspapers in cities from the Atlantic to the Pacific coast. In addition, the advertisements will be seen in representative farm and motor-trade papers.

The reproductions illustrate the forceful way in which the merits of Dixon's Automobile Lubricants are to be brought before the motoring public, point by point. It is our purpose to show to every motorist in the country how these points of merit mean better service and longer life to his particular car.

To the many distributors of Dixon's Automobile Lubricants we would make these suggestions. First: Read these "ads" as they appear. They contain facts which will help you to sell more of Dixon's Lubricants. Second: You will be notified when the advertising is to start in your locality. Identify yourself with the campaign and get the maximum benefit from it by having on hand a good stock and displaying it prominently. Tell people that you have it to sell by running an "ad" near ours in the papers. We will gladly furnish you with electrotypes for this purpose in which you can readily insert your own name.



VIGOROUS thought must come from a fresh brain.—*New Success.*

It Seems Funny

IT may seem funny—in fact, it does seem funny—how we humans differ. For example, we are told that among the Pennsylvania Dutch, mops are hard to sell, because the Pennsylvania Dutch housewife prefers to get down on her knees and use a scrubbing brush. The Dutch housewife also makes use of what she calls her "file." It will interest you to look up the word "file" in your dictionary. You will remember it better than if we were to tell you.

Only a few miles from the Pennsylvania State line, the women of New York prefer mops, and the market for scrubbing brushes is comparatively light.

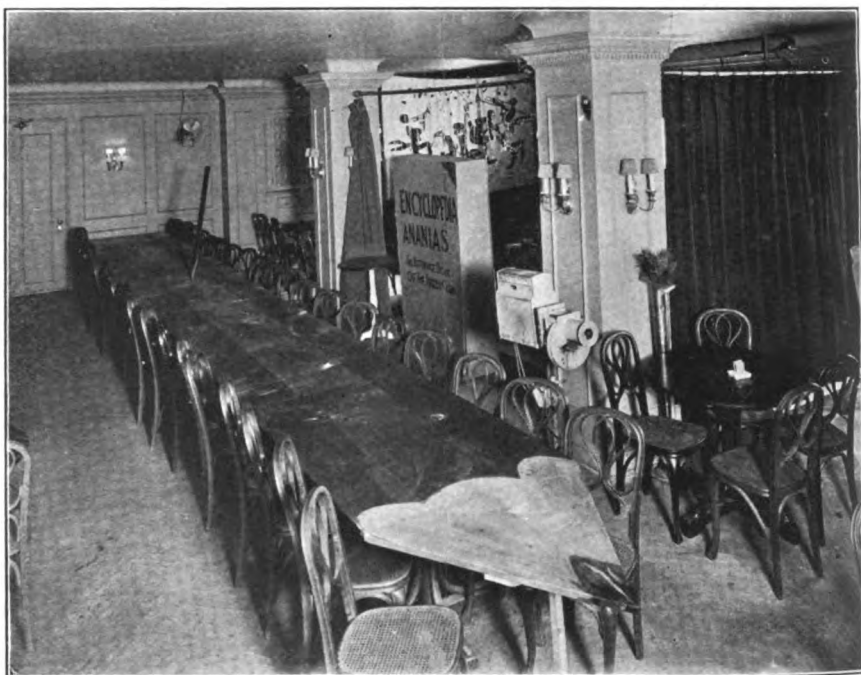
A cracker manufacturer claims lemon-flavored crackers are difficult to sell.

A candy manufacturer says that chocolates cannot be successfully marketed in green colored boxes.

A clothing designer points out that peg-top trousers still sell heavily in many small towns, in spite of the fact that large towns will have nothing to do with them.

In certain South Atlantic States it has been found necessary to add red aniline dye to kerosene in order to market it. People there think that the ordinary kerosene is "watered" and they want the colored product.

We are wondering if the habit of drinking hard liquors would have been curtailed at all if the distillers had been forbidden to color their distillations. It is not generally known that all whiskies and all rums are colored—we believe, with burnt sugar.



A Mammoth Success

THE fame of Dixon's ELDO-RADO—"the master drawing pencil" is not a local affair. Curious bits of evidence of the effect of the advertising behind ELDORADO come up every now and then.

One of these was the request for a mammoth ELDORADO pencil to be used at the banquet of the Press Club at the Hotel Alamac at Atlantic City not long ago. Mr. H. J. Latz, manager of the hotel, tells us that the affair was a large success.



WHEN mankind is ruled by how much can I do, instead of how much can I get, the high-cost-of-living puzzle will be worked out.—*Hello.*

The Pencil

WHEN I awake on mornings fair
I see upon my wall
A slender golden pencil on
The flowery paper scrawl.
No hand upon it guides the point,
It moves mysteriously,
But what it writes in lines of light
Is very plain to me.

I'm sleepy yet, I'd like to take
Another nap, but no!
I tumble out of bed and off
To catch a train I go.
That pencil is a ray of sun,
It will not let me shirk
My daily task but writes each morn,
"Get up and go to work."

MINNA IRVING.

We Are Told

THAT the dollar hair-cut is coming. The Barbers' International Union say it is in sight.

That Dixon's Flake Graphite is the stuff that will prevent squeak and wear of automobile springs.

That we can wear our hair long or we can buy cutters and have a "close crop." It's tough to pay a dollar for having your hair cut the way you don't want it.

That "Jack" Ready, the genial and rotund New York manager of the Dixon Company, considers Southern California the place to go to escape a hard winter. It would be a cinch for the barber to get a dollar, and a tip, from Jack for a hair-cut.

That Dixon's 677 is the stuff for automobile gears. It makes an auto as attractive and lovely as a sleeping infant. Speaking of infants, we are told that there are several new ones in the Dixon family.

That landlords have no sympathy with law, rents or the high price of coal. So they boost the rents and cut the use of coal. As some one said, "The public be —!"

That Herbert L. Hewson is on his way to the Pacific Coast to put Dixon's Automobile Graphite Lubricants on the western part of the map. We have no doubt that he will succeed.



DON'T overdo. Once a man went forth and scattered flattery indiscriminately. When he returned his office was crowded with persons who wanted to borrow money."—*New Success*.

"Father of the Typewriter"

ONE hundred years ago, Christopher Latham Sholes, whose name bears the well earned title of "The Father of the Typewriter," first saw the light in a little hamlet in Pennsylvania.

There is not an office in the most obscure hamlet throughout our great country where the voice of this little machine is not heard, with its incessant sharp click as the expert typist turns out page after page of matter connected with all lines of business and professional life.

The typewriter is to the business and professional office what the sewing machine is to the home.

The grave of the modest inventor of the typewriter is in Forest Home Cemetery, Milwaukee, and it is proposed to erect a monument as a fitting memorial to the man whose inventive genius is the means of furnishing the employment of hundreds of thousands of young men and women.—*The Stenographer*.

Blowing Bottles by Machines

THE article in the March number of GRAPHITE relative to lubricating bottle molds may have been somewhat misleading. The statement that molds must be swabbed with lubricant after blowing about forty bottles was intended to refer to average conditions. As a matter of fact, a hundred or more small bottles can get by with one swabbing. A little experimenting will show how often molds need to be lubricated for each size of ware.

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paints, etc. Sent free upon request.

Vol. XXII APRIL, 1920 No. 4

The Meaning of Money

IN the days of full production before the Great War, the nation that did the most work per capita accumulated the most money per capita.

In those days Germany was very rich.

Now German labor has set to work to get back the money that Germany lost when her great production ceased. One striking indication of this fact is the vote of the coal-miners of Saxony to work eight hours a day seven days a week, with no holidays of any kind. Some Germans are no longer following false gods. Some of them have gone back to their true friend—Work.

What is true of nations is equally true of individuals.

Those who seek more purchasing power by shorter hours and higher wages are cherishing an economic fallacy.

Money is meaningless without product. And the word "product" means something produced by Work. As long as world supply fails to equal world demand, as is the case at present, high prices will remain. If supply falls still further below demand, still higher prices will prevail. It is only by means of Work that prices

can be reduced and the cost of living brought down.

In a contest between an industrious nation and a lazy nation, the former is sure to become the more rich and powerful.

In a contest between industrious individuals and lazy individuals, the former will acquire the purchasing power.

German labor has set to work to pay Germany's debts, reduce her cost of living, and get back her money by attempting to do more work than the labor of any other nation.

Shall Americans sit back and watch Germany regain her power? Or will we give a meaning to the money this country has accumulated by doing our full share of Work?

—*Batten's Wedge.*

Since the above was written, Germany has been torn with internal strife and she is again following false gods.

Nevertheless, the fundamental principle underlying this article is still and always will be true. It is only by all of us doing our full share of work that we can give a meaning to the money this country has accumulated.

Europe Must Be Helped

ALFRED L. AIKEN, President of the National Shawmut Bank of Boston, in an article written especially for the American Manufacturers' Export Association, tells us that "if Europe were completely restored our extravagance would be a blessing to her manufacturers and to her people generally. To-day, however, she is far more interested in the promotion of a measure of thrift

among the people of the United States, which will enable them to extend to her the benefit of their savings. During the war we proved our friendship for the people of the allied countries by making many sacrifices, even to a reduction in the amount of food we consumed. Europe expects of us now, not that we should eat less food, but that we should assist her by saving some of the money which we are now spending so extravagantly."

Trade Conference, Mexico City

THE *Weekly News Bulletin* of the American Chamber of Commerce of Mexico states that the United States-Mexico Trade Conference held in that city in the middle of February aroused so much interest on the part of delegates that an extra session of the conference was held, on the Saturday following the announced closing day. The bulletin of the chamber further says that the conference "brought together 141 representatives of the big manufacturers of the United States, exporters and bankers and 275 Mexicans who were either the Mexican representatives of American houses here or Mexican merchants trading with the United States. Through the discussions in the trade conference and consultations afterwards these men came to a much better understanding and the results of the conference will be felt beneficially by the commerce between the two countries. This is the first trade conference ever held in a foreign country under the direction of an American Chamber of Commerce.

Wanted—An Efficient Cost System

THE above is the title of an article in *Geyer's Stationer*. It would seem from what we read that the Association of Stationers and Manufacturers are desirous of evolving a cost system that will give some well defined idea of what costs really are.

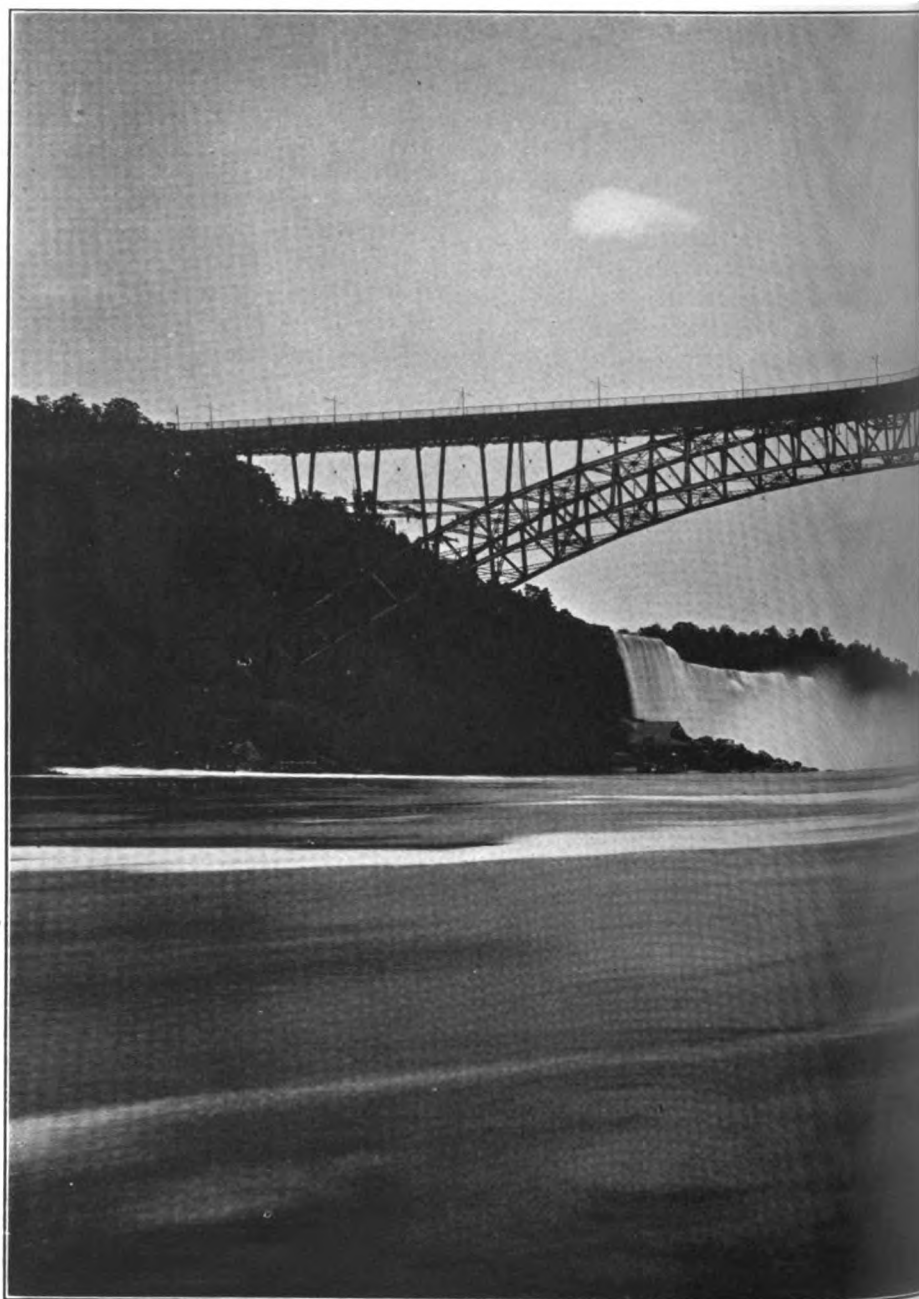
The idea seems to be a desire for a "simple cost-finding system"—a cost system that will permit a small dealer to find the costs and not an elaborate system of cost finding that is beyond the means of the small dealer or a cost system that makes it more expensive to find out what the costs are than it would be to follow the methods of our grandfathers.

Together with the finding of a cost system, there is the matter of taking stock and knowing what the inventory is.

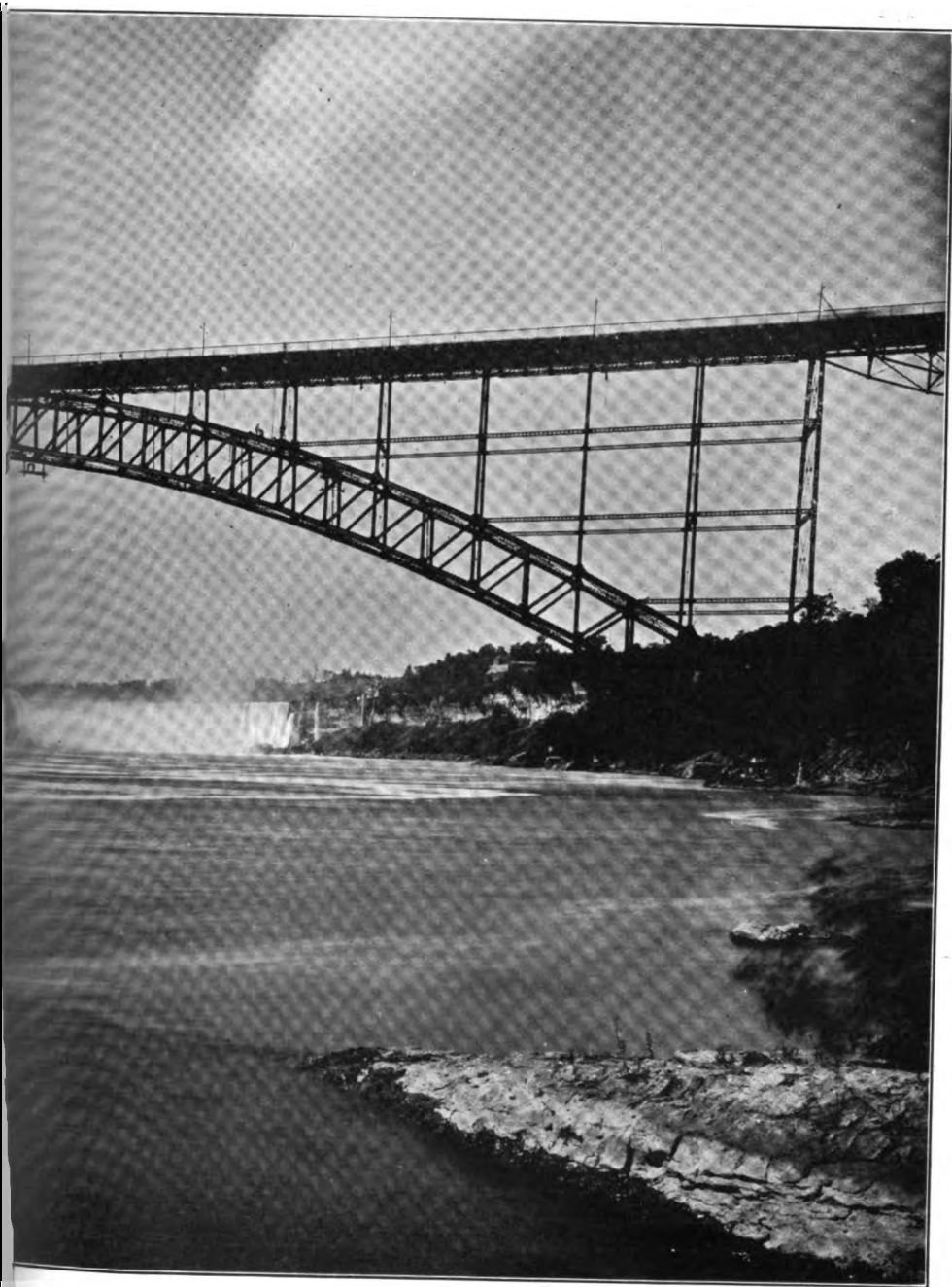
Luxuries

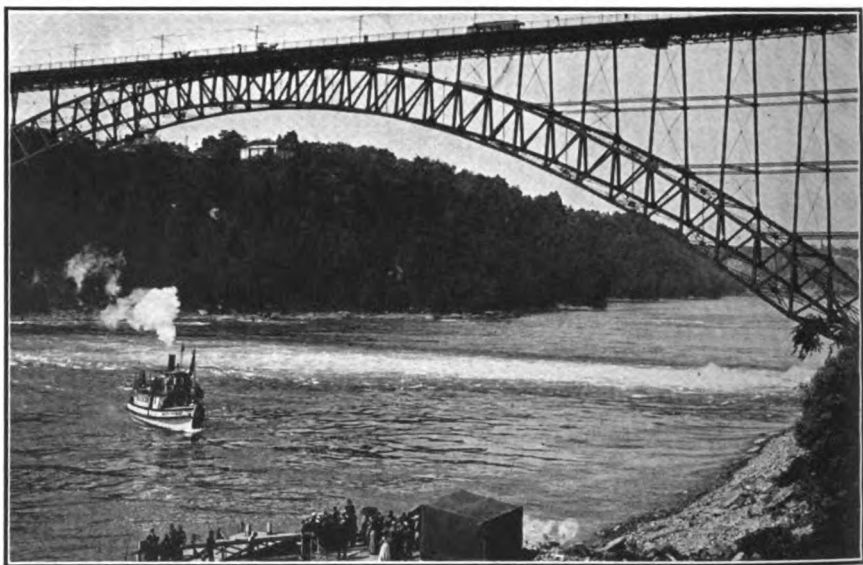
A NEWSPAPER makes the statement that the greatest time and effort saver that has been invented for the automobile is the self-starter, and that nobody who has used one would go back to the old-fashioned crank that strained your back always and broke your arm occasionally.

Perhaps no one would go back to the cranking any more than we would go back to gas-light instead of electric light. But, as a matter of fact, we get more light from gas than from electricity and there is more economy in the crank than in the battery,—and more exercise. We pay, and pay heavily, for all luxuries, but, as Emerson has told us, we all are as lazy as we dare to be, and so we pay.



Niagara Falls Bridge, I





Niagara Falls Bridges, International Railway

H. G. TULLEY, *President.*

H. C. YOUNG, *Purchasing Agent.*

H. L. MACK, *Supt. Bridges & Bldgs.*

E. E. LARKIN, *Asst. Supt. B. & B.*

THE above illustration, and also that on center spread, show bridges owned by the International Railway Company, painted with Dixon's Silica-Graphite Paint.

In the center spread illustration, the greatest hydro-electric development in the world can be seen. Niagara is harnessed and furnishes power and light to cities in Ontario and New York, hundreds of miles away.

When a guaranteed protective paint is needed for long service, reliability, sure protection of property so as to insure safety of passengers, resistance to dampness, ice, mist, wear, brine dripping from cars, etc., that paint is Dixon's Paint.

Ready to Reduce Foreign Freights

WE learn through the American Manufacturers' Export Association that the United States Shipping Board is ready to reduce freight rates to meet foreign competition provided exporters show by substantial figures that F. A. S. quotations at foreign ports of shipment are lower than those prevailing here. This important agreement was reached at a conference held in New York during the first week in March, between representatives of the Shipping Board, the Export Association of American Manufacturers and a large exporting manufacturer.

◆

ENGINEERS tell us there is enough energy in a pound of good coal to lift up a ton weight a little over a mile, but man has not been able to conserve all that energy.



Square Deal Auto Supply Co., Harrisburg, Pa.

THE above illustration shows a striking window display of Dixon's Automobile Lubricants by the Square Deal Auto Supply Co., Harrisburg, Pa.

The central feature of this unusual window is the well-known Dixon gear case. The moving gears furnish the necessary action and life in a window and never fail to attract the attention of those passing by. They show by actual demonstration just what takes place in the transmission of a car and how Dixon's Lubricants stick to the teeth at all times, even when the gears are idle. This is important, as every experienced driver knows.

The brilliant red cans of Dixon's Lubricants were grouped and pyramided in the background while photographs of famous racing drivers,

all users of Dixon's Lubricants, were placed in the foreground and on the side of the window itself.

Now that the time for the usual spring overhauling of cars is here, dealers can use no better means of pushing their sale of Dixon's Auto Lubricants than by means of window displays such as the above. They never fail to produce direct sales.



"I HAVE just emerged," writes Nurblich, "minus breath and a few buttons, from a rush hour subway express, and now realize why the traditional March hare was mad; he had to use the Inter-Burrow Rabbit Transit."

The above, from "The Sun Dial," reminds us that some of the Dixon family travel on the "Inter-Burrow Rabbit Transit" and know what it is to be packed like sardines and emerge "minus breath and buttons."

"The Guide Post"



TO the man who writes "The Guide Post" there come many letters about the use of Dixon Pencils. Some of these letters would be well worth printing in full if we had the space to do so. Some come from far-away places: the extremes of the thermometer are represented, and contrasts of civilization, in the names of cities and towns from which some of these letters are written. They all know the name Dixon, and what it stands for in pencil-making.

All trades and professions appear in these letters. But of all these the Artist is the most critical.

ARTISTS:

The artist's pencil *must* be right. The leads must be smooth, even, responsive, rich in tone, and absolutely free from grit. And it is of great importance that they run true to grade.

The B's are the leads which the artist chiefly uses. 6B (the softest) is a wonderful pencil for sketch work, many artists using it instead of charcoal, because it is smoother and more even and gives as free a line without dusting.

The best known artists use the various leads somewhat as follows,

although the greatest latitude in choice must be recognized where the personal element is so large a factor.

Trees, foliage, etc. 6B, 4B, 3B
 Interiors 2B, B
 Rough rapid sketching... HB
 Elevation and perspective.. F
 Detailing..... H, 2H, 3H

Pencils and Poetry

IN Philadelphia there lives a man who calls himself "The Pencil King." His name is Levis Moore. In selling goods his skill is great. He turns in orders at a rate to make the ordinary fellow look but once and then turn yellow. He also tries his hand at rhyme, and hits the bull's-eye every time. Read some of his effusions:

On Using a Dixon Pencil

"HERE'S just the pencil you need
 When you want to write
 memos with speed;
 It responds to the touch
 And it doesn't cost much,
 You can see what you wrote when
 you read.

Here's a lead pencil that leads,
 It's adapted to various speeds;
 If you want to write fast,
 In words that will last,
 It will meet every one of your needs.

There's a lead in this pencil that's
 good,
 Surrounded by wonderful wood;
 The rubber will rub all your errors
 away,
 And the price is so low you should
 buy while you may."



Dixon Exhibit at San Francisco Automobile Show

THE above photograph shows the Dixon booth at the San Francisco Automobile Show, which was held there, February 21st to 28th, in the Exposition Auditorium.

An appropriate setting for the exhibits was obtained by transforming the Auditorium into a replica of California scenic wonderland. Scores of motor industrial leaders from Eastern factories came to add their admiration to the attractive show.

There were 166 exhibits of passenger cars, trucks, tractors and accessories shown. The entire three floors of the Auditorium were taken up with exhibits and features with special music for all sections.

Throughout the week the show was the scene of widely varied activi-

ties. Tractor and motor experts, who completed postgraduate work in war zones, conducted educational features.

As usual, the Dixon booth was the scene of unusual interest in the subject of lubrication. A familiar feature was a gear case showing just how Dixon's Gear Lubricants perform in service. Motorists who see this demonstration cannot but be impressed by the peculiar qualities that have won for these lubricants an enviable reputation. "Once a user, always a user."

Mysterious Disappearance

"WHAT became of that young man who was paying so much attention to you?"

"He walked to the grocery-store with me, and after he saw how much we paid, he just quit coming."—

Houston Post.



New Castle, Pa., Auto Show

THAT dealers are enthusiastic over Dixon's Automobile Lubricants and are pushing the sale of same is evidenced by the above illustration which shows the booth of Elliott & Waddington at the New Castle, Pennsylvania, automobile show.

This display was arranged and attended by our representative, Mr. E. G. Mott, who reports that the show was a success for all exhibitors and for Elliott & Waddington and Dixon's Automobile Lubricants in particular.

Co-operation such as this is always productive of direct results in the way of increased sales.



BOBBY, just home from his first visit to the country, was telling the folks of its wonders. "And say, Ma," he said, "out on the farm they get milk from cows, and it's just as good as any."—*Boston Transcript*.

Durability Caught and Harnessed

POWER, when running to waste, as it does in many mountain streams, is caught and delivered by means of dams and pipes.

Paint durability is caught and harnessed to paint service by experts in selection and manufacture of the best pigment. It is given the name of Dixon's Silica-Graphite Paint. Its base is the nature-made silica-graphite, formed by Mother Nature in one body and mined as one material, ground to an almost impalpable degree of fineness, and harnessed with pure, boiled linseed oil.

The pigment, silica-graphite, withstands the wear of storms and the corrosive action of acids and alkalis. Its lastingness is shown by our "long service" records.

Dixon's Silica-Graphite Paint is reliable and enduring. It is used in all parts of the world under the most arduous conditions.

Future of Foreign Trade

THE Mechanics and Metals National Bank of the City of New York, in its March *Bulletin*, says: "Though the exchange rates are not in themselves so important as they are often thought to be, they are of great significance as barometers. They are not the chief evil, but they indicate the chief evil, and that is the fact that our excess of exports threatens to disappear because our European customers will lack the means of payment. They cannot pay without credit, and our extensions of credit seem to be coming to a stop. Their need of goods has been and is still so great that they have been and are still willing to pay the exorbitant prices brought about by the exchange rate; but they cannot pay those prices if we will not even extend them the credit to buy the goods.

Our trade with Europe will fall off gradually in any case. No one can expect it long to continue in its present unbalanced state. Europe's abnormal needs, the result of shortages of goods brought about by five years of war, must soon decline, not only as they are filled by goods from us, but as Europe returns to production. Mere extensions of credit, no matter how generous, will not ward off this decline. Credit demands interest; credit must be repaid; and the business men of Europe will go into debt only for goods that they need.

The real question before the American people is whether this decline shall be gradual, so that industry in this country may have time to become adjusted to it, or whether it

shall be sudden, whether it shall come as a shock, whether it shall result in a backing up of goods, whether it shall mean disorganization.

The *Bulletin* has considerably more to say on this interesting and important subject, but we lack space to print it.

Coverings—Clothes and Paint

MAN needs the protective covering of clothes. Metal and wood surfaces need the protective coating of some form of paint. It is not economy to buy a \$30 suit that will not last over a year, if by paying \$40 you can get a suit that will retain color and shape and last twice or three times as long.

It is so with paint. It is not economy to buy a cheap, short-lived paint, if by paying 50 per cent. more you are sure of twice or three times the length of service.

Dixon's Silica-Graphite Paint does give two or three times longer service than cheaper paints, and if records count, longer service than any other protective paint.

It may generally be purchased from local dealers. If not, you may order direct from us. It will pay you.

A Suitable Song

I CAN not wear the old suit
I wore long years ago;
It's shiny at the shoulders,
My knees and elbows show.
But on investigation I
Discover this is true:
I can not wear the old suit,
Nor can I buy a new.

—*Pennsylvania Farmer.*

UNMISTAKABLY clear comes the call to us and to you in the demand for DIXON'S ELDORADO, *the master drawing pencil.*

Its volume, its increasing volume, makes unprecedented demands on your stock.

This is the pencil the trade is really glad to sell.

It speaks well for the judgment of the salesman who recommends it. And for the House that sells it.

We take pride in its manufacture.

**DIXON'S
ELDORADO**
"the master drawing pencil"



*Made in 17 Leads—one for
every need or preference*

JOSEPH DIXON CRUCIBLE COMPANY
PENCIL DEPT. 190-J JERSEY CITY, N. J.

Canadian Distributors:—
A. R. MacDougall & Co., Ltd., Toronto



Goods Well Displayed Are Half Sold

EVEN though you cannot obtain the services of a trained window trimmer, at least you can keep your window clean and change the goods displayed frequently.

The secret of good window trimming is to keep the display as simple as possible. You'll agree there is nothing pleasing from the standpoint of attractiveness in a pawn shop window. One article neatly displayed will attract more people's attention than several dumped promiscuously into the window.

Change the display frequently, showing not more than three or four articles at a time. If you use a background or floor covering, avoid the use of clashing colors. Stick to one if possible and never use crêpe paper or cloth with a large design, which only serves to confuse the observer and detract his attention from the display itself. Always choose a pleasing and harmonizing color for trim which will accentuate the value of the object displayed. For example, note the window displays of the high-grade jewelry stores. There you will find some bit of jewelry or a precious stone very neatly arranged in a background of a most harmonizing color, usually black or gray. Seldom do you find the same display for more than three days. Did you ever see windows that attract greater attention?

Bear in mind in displaying accessories that the majority of people, even though not mechanically inclined, have a keen desire to see how things are made or how they work.

If the article shown is of a mechanical nature, try and show the construction. There are few of us who have yet outgrown the age when we like to take a watch apart to see how it works.

If you are showing an article that possibly cannot be shown in detail, at least print a few cards telling how well it is made or how simple is its construction.

Lastly, remember you pay good rent for your display window. Make it show a profit.—*Silver Edge*.

Dixon's Stove Cement

A BROKEN stove or range lining is a vexation familiar to every housekeeper. Such a break is a continued annoyance and danger. Clinkers form and hold fast in the fracture, and the iron, not fully protected, is liable to overheat and warp or crack.

Dixon's Stove Cement is a simple, rapid and effective repair for broken or worn stove, range or furnace linings. There is no need to send for a stove man, because anyone can make repairs quite as well and at comparatively little expense.

Dixon's Stove Cement is put up in small packages for the convenience of users and hardware and stove-repair dealers. It is a coarse powder that is made ready for use by simply working it into a stiff paste with a little water. It dries in a short time, and may be fired soon after application. If especially rapid drying is desired, add a small amount of molasses to the water. The longer the cement is soaked before use, the better the results, and whenever practical it should be allowed to soak at least two days.



T. N. Chambers—Dixon Representative in Chile

THE above illustration shows Mr. T. N. Chambers, of the Walworth International Company at his desk in Santiago, Chile.

Mr. Chambers is the Dixon representative in Chile, Peru and Bolivia for the sale of Dixon's Products except pencils, crayons, erasers and pen-holders.

To him we look for a wide extension of the sale of Dixon Graphite Products in these countries.

Standardize

CONCENTRATION should be made by a manufacturer upon those articles that can be relied upon to sell fast and in large volume.

It has been found through a research department that in the matter of cutlery more than 3,000 pocket knives are on sale, and that out of these 3,000 knives about 180 were "best sellers,"—knives that had a steady, constant demand.

The Dixon Company during the war time greatly reduced its lines and to-day is largely standardized, and the public is better served through the

Dixon Company being able better to conserve its space, and to do away with many styles of pencils, boxes, etc.

Lubrication of Locomotive Cylinders

MATERIAL improvement has been made in locomotive cylinder lubrication since means have been discovered by which selected flake graphite can be made to relieve oil of much of its duty. The benefit derived from graphite is particularly appreciated by engineers in charge of super-heater engines. The fine untuous flakes of graphite are introduced into the valve chests through special feeders and are carried into the cylinders with the steam and distributed evenly on the walls and rods. Not much is required to produce noticeable results, for graphite is not destroyed by the heat. Increased efficiency and a saving in oil and fuel are reported by roads that have adopted the graphite lubricators. The fuel item is naturally the most important from the standpoint of dollars and cents.

The sales agents of one style of lubricator state that "after the surfaces are graphitized the film of oil can do its work not only more easily, but with considerable saving in quantity. It is easy to see where the saving of fuel comes in with the use of graphite in valves and cylinders. There is less bypass of steam past the packing rings, which, of course, means saving in fuel. The main saving, immediately noticeable, is in cylinder packing, which is now the source of considerable trouble, particularly where there is a high superheat."

Dixon in Many Lands

THERE is a demand in all parts of the civilized world for Dixon's Graphite Products and shipments are daily on their way to various parts of the world.

The Joseph Dixon Crucible Company is represented by special agents as follows:

In Buenos Aires, Argentine, our representative looks after Argentine, Uruguay and Paraguay.

Our representative at Santiago, Chile, looks after the republics of Chile, Peru and Bolivia.

Our representative at São Paulo, Brazil, finds Brazil big enough to require all his attention. Perhaps few of our readers realize that you could put the entire United States in the Republic of Brazil and have room enough left over for what was once the German Empire.

Our representative in Havana, Cuba, looks after all of our interests in that enterprising and beautiful island.

Our representative in San Juan, Porto Rico, looks after that part of the United States, although perhaps some of our readers haven't yet realized that Porto Rico is part of the United States. At least it is a possession of the United States. Our representative in Porto Rico also looks after Santo Domingo and Haiti.

Our representative in Mexico City, Mexico, has a very large territory to look after, and that office will be enlarged when Mexico settles its family

difficulties and becomes, what it should be, and will be in time, a wonderful republic.

We have a special representative for Venezuela, Colombia, Ecuador, the three Guianas and Central America, but as yet we have not determined where he will locate his office.

Our representative in Copenhagen, Denmark, looks after all business in Denmark, Norway, Sweden and Finland.

For Italy, Spain, Greece, Morocco, Algeria and Tripoli we shall have an agent who is located at the present time at Milan, Italy.

India, Ceylon and Burma will be looked after by our representative at Calcutta.

The Straits Settlements, Malay State, Siam, Java and other Dutch East India Islands will be looked after by our representative at Singapore.

China and the Philippines will be looked after by our representative located at Shanghai.

Our representative at Tokio will find that Japan will demand his full attention.

Australia and New Zealand will be looked after by our representative at Sydney.

Our representative at Johannesburg will look after South Africa.

A little later on we shall have at Alexandria a representative who will look after Egypt, Syria, Turkey, etc.

France and some other countries not yet fully determined on will be looked after by our representative at London.



A Long Wearing Paint

Protective paint should be judged by the cost per year of service and not by the initial cost.

DIXON'S SILICA-GRAPHITE PAINT

is made in *first quality* only. It has a record for over fifty years of being the *longest service* paint. It has successfully overcome such deteriorating agents as gases, alkalies, acids and severe weather conditions because the pigment, flake silica-graphite, is practically inert and does not combine chemically with the vehicle, which is the best boiled linseed oil.

*Write for long service records
and Booklet No. 190-B.*

Joseph Dixon Crucible Co.
Jersey City New Jersey



Established 1827



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UNIV. OF CHICAGO
VOL. XXII

Graphite

MAY, 1920

No. 5



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



***Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead***



OFFICERS

GEORGE T. SMITH, *President*

J. H. SCHERMERHORN, *Vice-President*

HARRY DAILEY, *Secretary*

WILLIAM KOESTER, *Treasurer*

ALBERT NORRIS, *Assistant Secretary and Assistant Treasurer*

DIRECTORS

GEORGE T. SMITH

GEORGE E. LONG

WILLIAM G. BUMSTED

EDWARD L. YOUNG

J. H. SCHERMERHORN

HARRY DAILEY

ROBERT E. JENNINGS

Comptroller

JOHN J. NEVIN

Purchasing Agent

JOHN I. McCOMB

OFFICES AND SALESROOM

NEW YORK SALESROOM, 68 Reade Street; SAN FRANCISCO OFFICE, 444 Market Street; PHILADELPHIA OFFICE, 802 Finance Building; CHICAGO OFFICE, 1323 to 1327 Monadnock Block; BOSTON OFFICE, 49 Federal Street; ST. LOUIS OFFICE, 501 Victoria Building; BUFFALO OFFICE, 409 Erie County Savings Bank Building; ATLANTA OFFICE, 225 Peachtree Street.

LATIN-AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S PENCILS

Walworth International Co., 39 Broadway, New York, N. Y.

SALES OFFICES AT

Buenos Aires, Argentine

Santiago, Chile

São Paulo, Brazil

Havana, Cuba

Mexico City, Mexico

Agent for Porto Rico, Virgin Islands and San Domingo

H. Glyde Gregory, Royal Bank Building, San Juan

FOR DIXON'S PENCILS

National Paper & Type Company, 31-35 Burling Slip, New York, N. Y.

With Branch Houses in Mexico, Cuba, Peru, Argentine, Uruguay, Venezuela, Porto Rico and Colombia

CANADIAN AGENTS

FOR DIXON'S PENCILS

A. R. MacDougall & Co., Ltd., 468 King Street, West, Toronto, Ontario, Canada

FOR ALL PRODUCTS EXCEPT DIXON'S PENCILS

Canadian Asbestos Company, Montreal, Quebec, Canada

Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

MAY, 1920

Number 5

Why Do You Advertise When You are Behind in Deliveries?

THIS seems to be a very natural question, and the answer involves the discussion of a vital policy of this business—a policy that is fundamental.

If we were building a business for to-day our policy would vary from day to day with the temporary changes with which every business has to contend.

But we are building for the time to come and we hope that this business will become many times greater than it is to-day. Without the proper foundation it would undergo violent changes dependent upon temporary national, local or even imaginary conditions.

If we should permit ourselves to become inflated with self-confidence when business conditions are favorable, restricting our selling and advertising activities, and go down in the dumps when conditions are not so favorable, this business would not amount to any more than the existing conditions would make of it.

We say right now, without reservations, that we hope, regardless of how aggressive and efficient our manufacturing department may be, that it will never be able to catch up with our selling organization.

If our efforts should be halted in the middle of the road in times of liberal buying to wait on the manufacturing department, there might come a time when the manufacturing department would have to suspend operations while waiting on the sales organization.

With such a policy we would be running around in a circle, disorganizing one day and reorganizing the next.

The greater the demand for our product, the quicker the turnover for merchants; and the more frequent the turnovers, the larger is the volume of profit.

In this business advertising is a sales policy—the same as our policy of maintaining a sales organization—and we might as well consider the elimination of one as the other.

Neither will be eliminated, as this business needs both if we are building for the future.

We hope the idea will never creep into this organization that there will be any let-up in aggressive methods, which might suggest that when business is good there is no occasion for work and when business is poor it is too hard to get.

We constantly have in mind that the American people are much more concerned in their own affairs than in ours, and if we should restrict our selling and advertising activities they will begin to forget us—and this would be our fault.

We are going ahead with the idea of increasing the present momentum in favor of our goods; and if conditions should turn face about, our dealers and ourselves will be in a better position to hurdle obstacles than if we originated a policy for each condition as it arose.

Old State House

OF the many Colonial shrines in the city of Boston, probably the most noted is the one we present on the front cover of this issue.

The present edifice was built in 1728 and was therefore identified with the succession of pre-Revolutionary events in Boston. This gives it a special distinction among the historical buildings of the country. It has served as Town House, Court House, City Hall and State House. During the Revolutionary War many of the Tory emblems used in the decoration of the building were destroyed, notably the Lion and Unicorn. These have been restored and are

seen on the third floor at the east end of the building.

From the balcony on the second floor the Declaration of Independence was read to the people assembled; and at the close of the war General Washington stood here to receive the homage of the citizens of Boston. Directly in front and about 150 feet distant occurred the Boston Massacre in March, 1770, when the first blood was shed in the Revolutionary War.

Inside, the building has been restored so that it is practically the same as in Colonial days. The eastern room on the second floor was the Council Chamber where the royal governors sat. The western room was the Court Chamber, and between was the Hall of Representatives. The rooms are now occupied by the Bostonian Society and contain a rich variety of interesting relics, among which is the original printing press of Benjamin Franklin.

The pencil etching shown on the front cover was made by Earl Horter, and with Dixon's ELDORADO—"the master drawing pencil."

Some Letter!

"I have recently bought a new Duesenberg racing car and am about to start out through the dirt tracks west of Denver, getting back in time for the Speedway races in Los Angeles.

I trust you will ship me a supply of Dixon's Graphite Greases that I will need, including flake graphite for my tires. I assure you I would as soon quit racing as to quit using Dixon's Lubricants."

BRENT T. HARDING.

Graphite in a New Rôle

GRAPHITE lubricates everything when properly applied. It lubricates electric fans, locomotives, automobiles, rolling mills, silk spindles and giant overhead cranes. But the prize use was accidentally and literally unearthed in a mishap on the Great Central Railroad, just outside of London.

The *Railway Maintenance Engineer* tells us of this happening. About six miles outside of London, the Great Central runs through a cut about a mile long. This cut had retaining walls of concrete faced with brick and these walls were in the ground about eight feet below the subgrade onto a stratum of hard blue clay. Concrete slabs were placed below track level to act as braces and insure greater stability.

After the initial settling had taken place in 1905 no further trouble was experienced until February, 1918, when the outbound passing track alongside the wall was found to be lifting. The condition became so bad that in a very short time it became necessary to cut this track out of service. Close observation was kept on the wall and plans made for diverting the traffic.

On the evening of February 18, four days after the first movement was noted, some 200 yards of retaining wall moved forward. The maximum travel was about twenty feet at the center, with the ends still in place.

A new wall of heavier construction and with counterparts extending back into the slope was built.

At the same time the roadbed was brought up to level by filling and two tracks laid. This work was completed in seven days. After that the wall which had slipped was removed and the original four-track road relaid.

During the excavation for the new wall careful examination was made for the slide line. This was found, and was also found to be of a greasy graphite nature. In each of the excavations made this same fault line was found, which makes it more than reasonable to suppose that graphite has found a new if not a popular use.

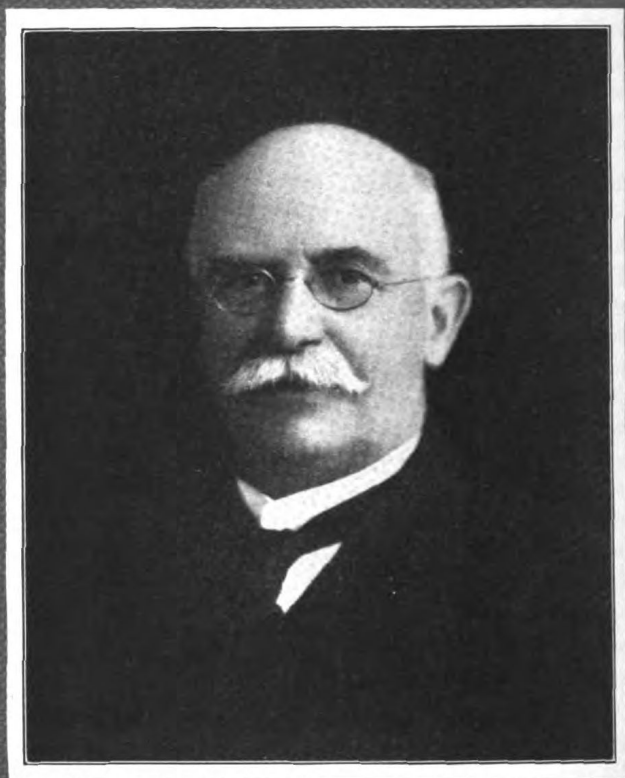
The Song of a Pencil

SHARPEN me, friend!
At the touch of the knife
I strip for work.
For the length of my life
I never will shirk—
Sharpen me, friend!

Write with me, friend!
Write the words of life or death,
Enduring rock and fleeting breath.
Write the words of shop and mart,
Of busy trade, enchanting art—
Write with me, friend!

Draw with me, friend!
Draw the lines of furrowed care,
Of trees and birds up in the air,
Of landscapes green, of autumn
brown,
Of men in wood and vale and town—
Draw with me, friend!

And sharpening, writing, drawing,
friend,
I'll serve you till I reach my end.



Vice-President George E. Long Retires

IN the April number of GRAPHITE we announced the celebration of the seventieth birthday of Mr. George E. Long, Senior Vice-President of the Joseph Dixon Crucible Company. Little did it occur to us at that time that in the very next issue we would have occasion to make this additional important statement affecting Mr. Long.

On April 19th, following his re-election as a member of the Board of Directors at the annual meeting of the Stockholders of the Joseph Dixon Crucible Company, Mr. Long announced his decision to retire from the office of Vice-President. Thereby he terminates forty-three years of active and valuable service with this Company, beginning in the capacity of a stenographer and advancing to the offices of Secretary, Treasurer and Vice-President, respectively.

It is with a mixture of regret and congratulation that the entire Dixon organization receives the announcement of Mr. Long's retirement—regret over the loss of the intimate personal contact with him, and congratulation that in the sunset of life Mr. Long is in a position to enjoy, by whatsoever method he may choose, a well earned "vacation"; and it is the earnest hope of the great Dixon family that it will extend over a long period of years.

It would be difficult to enumerate in detail the contributions that Mr. Long has made toward the wonderful growth of the Dixon Company's business during his service of forty-three years. In a much wider sphere than the Dixon family circle, Mr. Long is recognized as the "Daddy" of Graphite Lubrication, and as the "Father" of Silica-Graphite Paint for protective purposes. Similarly in advertising circles he has been recognized for many years, as he has been an ardent advocate at all times of ample publicity or advertising to inform possible users of the Dixon Products in their wide variety. But, as already indicated, these specific items can only suggest Mr. Long's wide usefulness during his period of service.

To Mr. George E. Long, as the retiring Vice-President, we bid a fond farewell and God Bless You, while to Mr. George E. Long, Citizen, we express pleasure that we may have his continued counsel on our Board of Directors.



JOHN J. NEVIN

John J. Nevin was appointed Comptroller of the Joseph Dixon Crucible Company and the American Graphite Company October 15th 1919.

It has taken from that time to now to get a photograph, and the only way it was done was by bringing the photographer to him.

"Judge" Nevin, as he is known to his many friends, needs little introduction, as he has been a lifelong resident of Jersey City.

The Joseph Dixon Crucible Company and the American Graphite Company are to be congratulated in securing the services of a man who so successfully filled the position of Assistant Comptroller of the State of New Jersey for several years, and thereafter was called by the National Government to Washington, D. C., as Comptroller of the United States Shipping Board—Emergency Fleet Corporation, where he remained until last fall, when he resigned to become a member of the Dixon official family.

Annual Meeting, 1920

THE stockholders of the Joseph Dixon Crucible Company held their annual and regular meetings on Monday, April 19, 1920. The following directors and officers were elected:

DIRECTORS

GEORGE T. SMITH GEORGE E. LONG
WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
ROBERT E. JENNINGS

OFFICERS

GEORGE T. SMITH, *President*
J. H. SCHERMERHORN, *Vice-President*
HARRY DAILEY, *Secretary*
WILLIAM KOESTER, *Treasurer*
ALBERT NORRIS, *Asst. Secretary and Asst. Treasurer*

Of the 20,000 shares of stock 19,213 were voted. Undoubtedly a greater number would have been voted had it not been that a number of shares are held by estates, the executors of which do not feel at liberty to vote in an election.

The report made by President Smith and the remarks made by him on the business of the Company were received by the large number of stockholders present as most satisfactory and pleasing in every way.

The American Graphite Company, incorporated under the laws of the State of New York, is a subsidiary of the Joseph Dixon Crucible Company, and its annual election was held on the same day as that of the Joseph Dixon Crucible Company. The following officers were elected:

GEORGE T. SMITH, *President*
J. H. SCHERMERHORN, *Treasurer*
HARRY DAILEY, *Secretary*
WILLIAM KOESTER, *Asst. Secretary and Asst. Treasurer*

The directorate is the same as that of the Joseph Dixon Crucible Company.



This is a new package

*Ask the Dixon Salesman about
Nos. 100 and 105*

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paints, etc. Sent free upon request.

Vol. XXII MAY, 1920 No. 5

Thinking, Feeling, Working

THE relation of all three—thinking, feeling, working—should be a cordial one amongst the members of any organization—business or what you will.

Let us consider together the intimacy of the three in a large business establishment.

First off, let us mark the difference between thinking and mere feeling. To think is to compare, to analyze, to build up in the mind. To feel is to experience emotions—of disappointment, or gladness, or surprise.

You really do not think very much about your state of feeling toward your fellow-workers, or about the company that employs you. But you do feel one way or another. And mere feeling alone is not a safe guide in the world's work.

An attempt at thinking, which brings into view the good with the not-so-good, the advantage with the disadvantage, is a fine corrective of uneasy feeling.

Now the reaction of feeling and thought on work itself is very great. Let us then get out of our state of feeling into calmer thought, in order that the work we do may be done

in a frame of mind favorable to efficiency—by which we mean the efficiency which benefits the worker as well as the work.

Hobbies

HOBBIES are not for children. The habit of mind that fosters them is not childish nor freakish.

A hobby is a very healthy recreation, beneficent in its power of distracting from ordinary workaday pursuits.

Let us all praise the hobby and the man with a hobby. He is likely to be a very well-balanced, clear-headed person, in business and out; one whose talk is not solely "of oxen." He brings a flavor to conversation.

And so the voice of Experience speaks clearly, "Unless a man have a hobby he shrinketh."

Growing Old

J OGDEN ARMOUR, in *Armour's Magazine*, tells us that a person is never old until he quits growing; and he need not quit growing until the end of his years. He must be a *learner*; he must be a *thinker*; and he must be a *doer* all his life. Experience is the greatest of all teachers.

"Profanity is used by poor talkers to fill in blanks in their conversation when their brains are missing fire. By the aid of profanity, a man with a one-candle-power brain can talk steadily for a long time.

"Profanity is Biblical language with reverse gear, and is used to back the user out of the strait and narrow way."

Thick or Thin

THE ancient English law of our vigorous forefathers and foremothers used to turn on the thickness of things.

A man could beat his wife, "providing the rod is no thicker than a man's thumb."

Now customs, feeling, etc., have become so thin that Reno will provide a divorce if a man beats his wife with a pillow or a feather.

At one time paint protection was considered achieved if a thick coating was put on. But thick coatings peel off; they allow dampness to get beneath, and then rust begins.

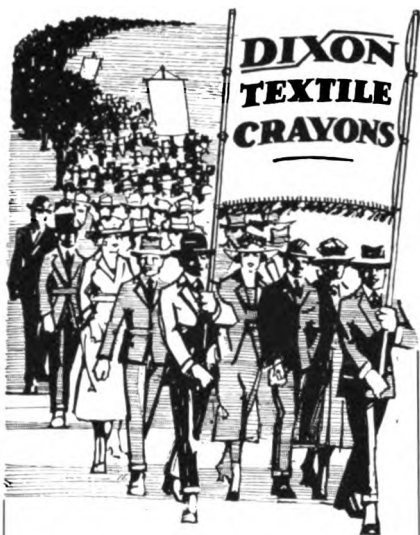
Dixon's Silica-Graphite Paint is a success, because the thin, tight, scale-like mail of flake silica-graphite clings so close to the metal, that not even air or dampness can get beneath it. It is like a silver plating, a part of the metal itself. This is not possible except by the use of Ticonderoga, New York, flake silica-graphite, mined alone by the Dixon Company.

Is such a paint worth more per gallon? Much more, because it lasts more years and saves in labor and material. A mechanical mixture of silica and graphite will not give this protection; it is too thick. Dixon's uses Nature's mixture, the thin, tight-clinging, elastic pigment that allows for expansion and contraction and yet resists dampness and air penetration.



You can't keep success away from the man who works and is on the level.

—*New Success.*



It "feels good" to lead the parade.

If you are not with the army selling or using

DIXON COLORED CRAYONS

for textile uses, perhaps it will pay you to look into their claims to leadership.

Send for samples to

JOSEPH DIXON CRUCIBLE CO.

PENCIL DEPT. 190-X

JERSEY CITY

NEW JERSEY

DUPLIGRAPH

the name of a complete indelible copying pencil line—

HARD LEAD *yellow finish*

MEDIUM LEAD *lavender finish*

SOFT LEAD *purple finish*

INTENSE COPYING

“Order Dupligrph in anti

JOSEPH DIXON

PENCIL DEPT. 190

Canadian Distributors: A.

Dixon's Dupligrph

DUPLIGRAPH

Plain; and with mouthpiece;
and with point protector.

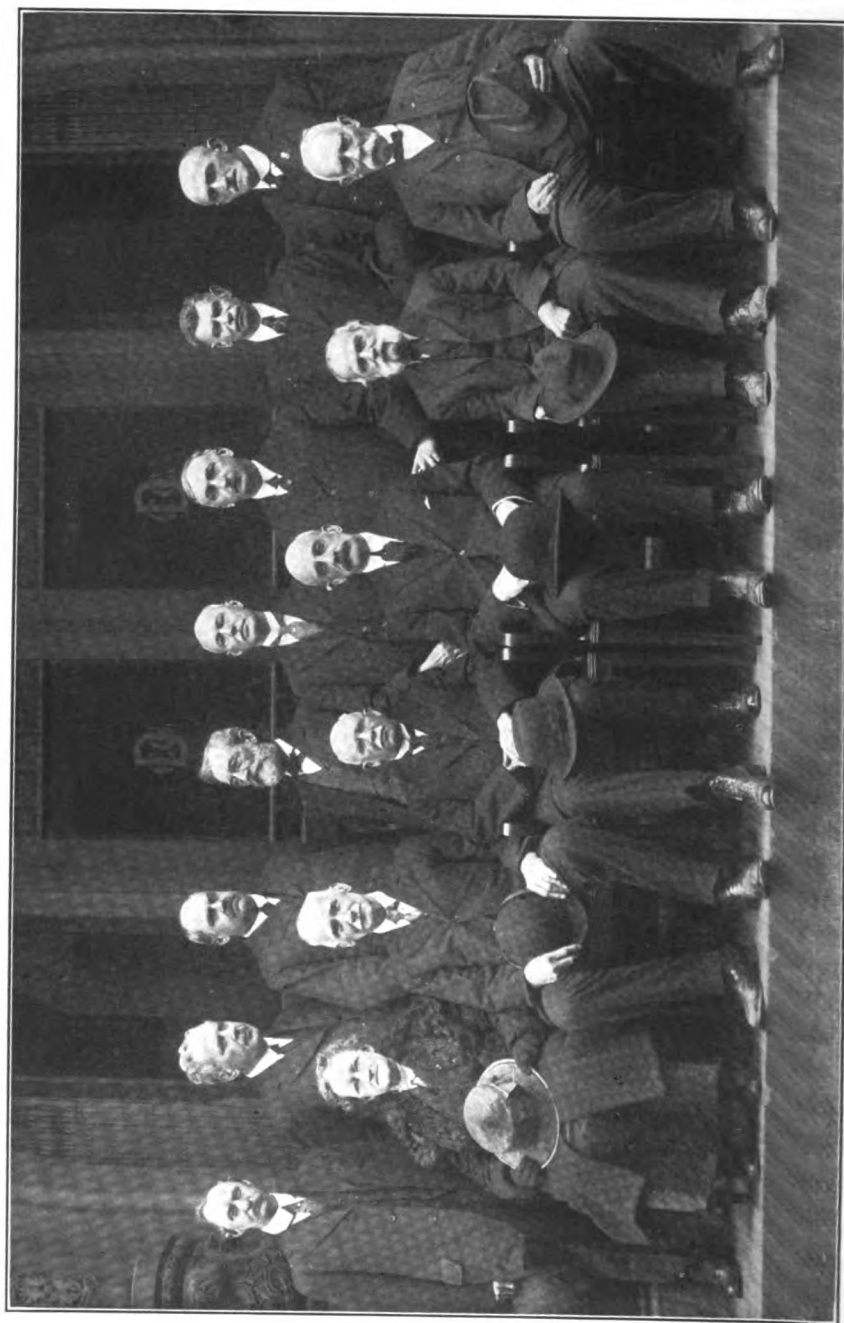
“Be not the last” to get acquainted with the first of its class in serviceability and saleability.

n” is a straight tip to dealers.

C I B L E C O M P A N Y
JERSEY CITY, N. J.

ugall & Co., Ltd., Toronto

Dixon's Dupligraph



President Smith and Some of the Dixon "Forty-Year Veterans"

THE illustration on the opposite page shows President George T. Smith of the Joseph Dixon Crucible Company surrounded by some of the "Forty-Year Veterans" of the Company. The group is made up of the following:

Standing (From Left to Right)

- 1 JOHN S. POOLE.....1878..Foreman Shaping Dept., Pencil Works
- 2 JOHN A. TRACY1874..Superintendent Pencil Works and Brass and Rubber Works
- 3 WILLIAM KOESTER.....1880..Treasurer
- 4 T. B. VALLEAU.....1878..Accountant
- 5 R. VAN DIEN.....1880..Pencil Expert
- 6 HARRY DAILEY1880..Secretary
- 7 GEORGE SCHEPLER.....1877..Foreman Nickeling Dept., Brass Works
- 8 JOHN HEINTZ1877..Foreman Crucible Packing Shop

Seated (From Left to Right)

- 9 EMMA RAMSEY1880..Grease Works
- 10 JOHN LINCKS.....1862..Foreman Stove Polish Dept.
- 11 GEORGE E. LONG1877..Former Vice-President
- 12 GEORGE T. SMITH.....1902..President
- 13 CHRISTIAN VOEGLER.....1864..Boxmaker
- 14 MATTHEW EARLE1872..Foreman Capping Dept., Pencil Works

This group represents only fourteen out of the twenty-one because the "Veteran" of us all, Mrs. Kate Steinhauser, was then on her death-bed. One or two of the men were sick, while all of the "gentle" sex, with one exception, refused to join the group, as they did not wish their friends to know that they were old enough to be 40 years in the employ of the Dixon Company.

Since this photograph was taken, Mr. Christian Voegler has passed away, mention of which will be found on another page.

The names of the seven who are missing are as follows:

- | | |
|-------------------------|---------------------------|
| JOHN WAGNER1874 | LOUIS NEWTON1878 |
| BELLA KELLY1875 | MARY EWALD1879 |
| MARIA O'BRIEN1878 | PHILLIP PFONNER1880 |
| MINNIE HUNT.....1880 | |

"The Guide Post"



WHETHER our pace is that of a pedestrian or that of a racing aeroplane, we depend, as occasion presses, on Guide Posts. So the usefulness of a Guide Post in the affairs of the world, on foot and overhead, is past question. Proceed we, accordingly, in our rôle to point out to Technical Men the things we have in mind when making pencils for their use.

TECHNICAL MEN:

Experienced technical men are familiar with European grading. The ELDORADO is graded accordingly to the same *universal standard*. The ELDORADO, moreover, has been declared equal or superior to any drawing pencil ever made, either in America or in foreign countries. The leads are strong, long wearing, even in tone and free from grit or blemishes.

The most careful specifications you make are not more studiously adhered to than our standard for the ELDORADO leads. We unhesitatingly guarantee it to be equal to any drawing pencil ever made.

For the benefit of beginners of little experience in the use of pencils, we offer the following recom-

mendations as representative of the choice of leading technical users:

ARCHITECTS, 2B to 3H:

Freehand, 2B, B.

Outline sketching, HB.

Scale drawing, F to 3H.

ENGINEERS, HB to 6H:

Sketches on tracing paper, HB, F.

Field notes, 4H.

Plan work to scale, 6H.

COMMERCIAL DRAFTING, H to 8H:

Detail, H to 4H.

Scale Drawing, 6H, 7H, 8H.

Jack Lewis in Samaritan Rôle

JACK LEWIS, Atlanta representative of the Joseph Dixon Crucible Company and also vice-president of the Atlanta Automobile Association, has appeared in the rôle of the Good Samaritan during the trolley strike in that city.

As vice-president of the Automobile Association he has issued an appeal to the automobile owners of Atlanta calling their attention to the opportunity afforded them to be of service during the trolley tie-up. Mr. Lewis states that the automobilists of Atlanta have at all times shown their disposition to extend every courtesy possible to the less fortunate ones who do not possess cars, and that he considers it necessary only to call attention to the emergency.

He also requests that pedestrians who find it necessary to travel for any distance in the city, hail cars which have empty seats and request a lift.

Jack says: "A great part of the problem will be overcome if passing automobiles are hailed and the drivers fill every seat."



Lloyd A. Wagner

MR. LLOYD A. WAGNER, whose photograph is reproduced at the head of this column, has just been promoted to take charge of the Pacific Coast territory for Dixon Pencils.

This has come about through the resignation of the popular Charles E. Wehn—"Eldorado" Wehn, as his customers called him—who formerly travelled through California and adjacent territory for Dixon. Mr. Wehn is going into the manufacturing business, and takes with him the best wishes of his former Dixon associates.

"The Northwest" was formerly Mr. Wagner's field of operations for Dixon, in which he distinguished himself by the kind of work that wins

recognition at headquarters and promotion when the time is ripe.

"Wagner wears well," as one of his customers put it, which means that he carries with him into his new field, we are sure, the best wishes of all his old customer-friends, many of whom he will continue to visit, as in the past. And his standing is such with his own people that he enters upon his new duties for DIXON with the kind and confident regard of all good Dixonites, North, East, South and West.

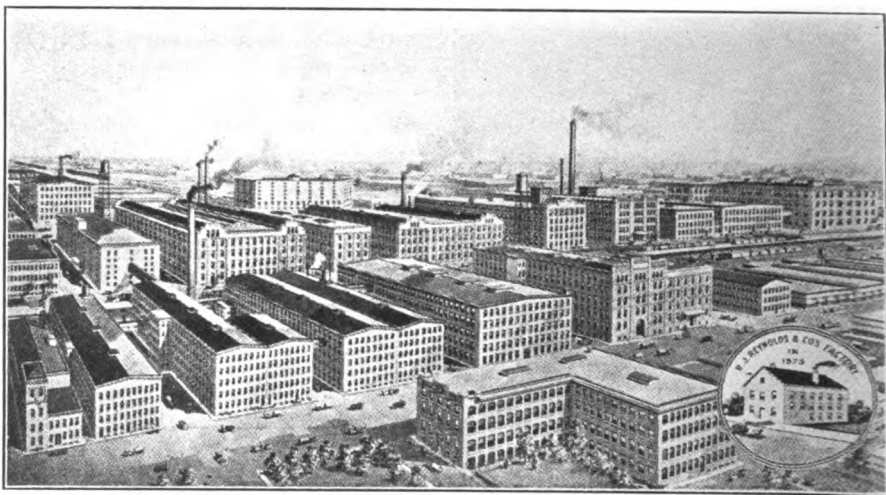


Smokestacks and Tank

Rosenberg Bros. Co., Santa Clara, Calif.

THE structures illustrated above are protected with Dixon's Silica-Graphite Paint.

It has been the experience of Rosenberg Brothers Company that money put into the highest grade, long-wearing, dampness-resisting protective paint is a profit in the labor and material account. That is the reason why they are users of Dixon's Paint.



R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

THE above illustration shows part of the immense plant which is the home of the famous "Prince Albert" smoking tobacco, grown in the "Piedmont Tobacco Belt."

The plant is also said to be the largest cigarette producer in the world. This immense business is a monument to the industrial genius of Mr. R. J. Reynolds, who was born in Rock Springs, Va.

The most expensive and best co-ordinated machinery is installed, and all the equipment of the plant spells efficiency and economy.

For many years this large company has used Dixon's Silica-Graphite Paint to protect metalwork of all kinds, smokestacks, bins, boiler and engine room equipment, roofs, tanks, structural supports, pipes, chutes, etc.

Dixon's is not only a sure protector, but is a safe inert protector. The pigment does not harm or taint the most delicate factory product.

Dixon's lasts longer and saves in labor and material. When the price of all paints is high, remember that what you get is more important than what you pay.

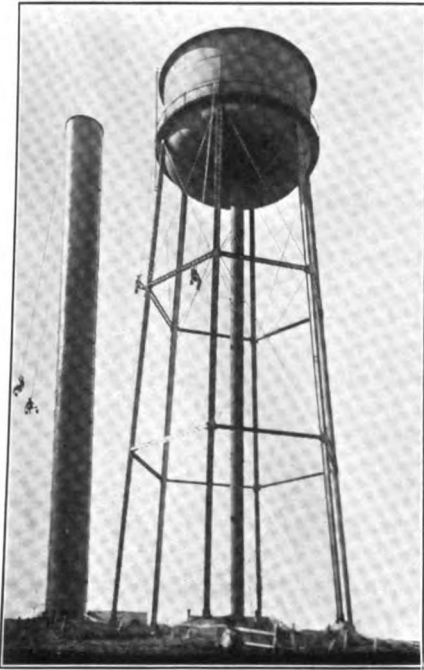
1839—Christian Voegler—1920

IT was a shock to the Dixon Company to learn of the sudden death, Tuesday, April 27, 1920, of Christian Voegler at the age of eighty-one years.

Mr. Voegler had been in the employ of the Dixon Company for fifty-six years and ranked third on the Dixon Honor Roll in length of service, having started in 1864.

He had just celebrated his eighty-first birthday on Sunday and on Monday the 26th filled his quota of day's work in rounding out his fifty-six years of almost unbroken attendance.

Mr. Voegler was known as a man of faithful adherence to duty, of quiet unobtrusive manner, and of kindness.



Standpipe and Water Tank

Longview Municipal Waterworks,
Longview, Texas

MR. ROY H. DUCKETT is the Superintendent of this finely kept up plant.

The D. W. Pyle Company of Houston, Texas, and Lincoln, Nebraska, painters for water tanks, etc., recently painted the interior and exterior of the standpipe and water tank illustrated above with Dixon's Silica-Graphite Paint.

Both structures are 125 feet high; the standpipe's capacity is 75,000 gallons; the tank's, 15,000. Dixon's Silica-Graphite Paint is inert and does not taint water. It is the most popular, longest service protective paint in the waterworks field.

Both the D. W. Pyle Company and Mr. Duckett are believers in interior and exterior painting of standpipes and tanks, and their practice is justified.

The final economy is greater, because tanks last longer and do not collapse from interior deterioration.

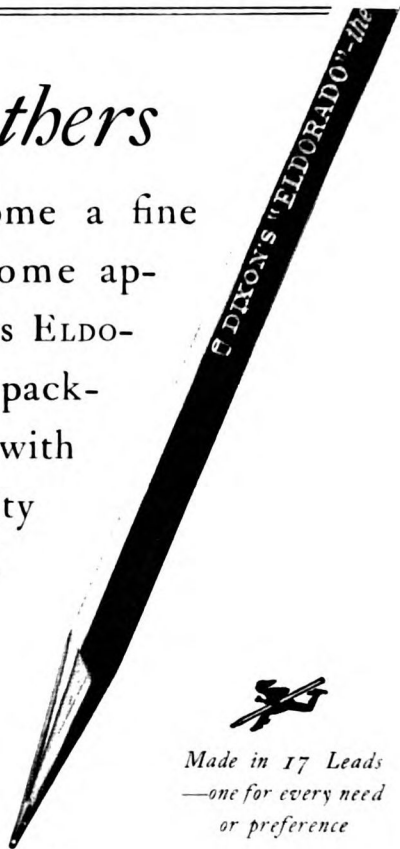
"Is This Correct?"

MANY years ago there was a forewoman in the Dixon Pencil factory who made it her duty to go over the calculations, made in the Dixon office, of the weekly payroll. When the books came from the factory to the office they showed the number of days worked, the rate, and the amount of piece work done.

Being quite human, the ones in the office now and then made a mistake in the calculations. When that forewoman sent back the book or books, as the case might be, did she say, "You have made a mistake;" or, "This is not right;" or, "These figures are not worth a d—" or again, "You do beat the d— in making mistakes!"? Not at all. She was quite unlike many men that we hear of, who are, to say the least, very explosive. That forewoman, who was a fine executive in the factory, invariably sent the books back with the following memorandum, "Is this correct?" Of course she knew well enough that it was not correct, but that was her kindly way, and it made the payroll men more careful, as they hated more to have that little message come to them than one would suspect.

Fine Feathers

Fine feathers become a fine bird. The handsome appearance of DIXON'S ELDO-RADO, in finish and packing, is in harmony with the superlative quality of the pencil itself.



*Made in 17 Leads
—one for every need
or preference*

**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.

Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto

The Way it Works

A CIRCULAR letter is sent to a manufacturer with regard to the painting of metal smokestacks. He replies:

"Circular letter received. Kindly quote us on a paint suitable for a metal smokestack. Please inform us in what quantities same is packed and whether it can be put on the stack while same is warm."

We acknowledge receipt of letter; we thank him for his reply; we advise him how the paint is packed; furnish prices and tell him the paint has been on the market for over 50 years and has given wonderful satisfaction. We tell him that it is better to apply the paint when the stack is cold, but if this is impossible, it can be applied to a warm surface if carefully applied so that it will not run.

We receive his order for one barrel paint "most suitable for metal smokestack." The paint is shipped.

Time rolls on, as time always will, and four years later we write again asking him if smokestack needs repainting. Reply comes that the stack looks as good as when paint was first applied, and probably will not need repainting for a year or two longer.

This is not a fancy sketch, but is an instance that happens frequently when Dixon's Silica-Graphite Paint is used.

◆
SELF-HELP has accomplished about all the great things of the world.

—*New Success.*

◆
WE shall find nothing in the world which we do not find in ourselves.

—*New Success.*

Farm vs. City

WE read that in New York State, in 1919, 35,000 persons moved from country to city, and only 11,000 from city to country.

If many more of our young men would go to an agricultural college and then to the soil and revolutionize farming, more food products would result and the cost of living in that respect be greatly reduced.

We need more scientific farmers and we need improved distribution and transportation methods.

What is it that Constitutes a Gentleman?

A SIGHTSEER in London for the first time is most likely to be taken early any Sunday morning to Seven Dials, where thousands of ragged people attend auction sales of every conceivable second-hand thing ever made by a machine or a human hand, and the several auctioneers, at different points in huge crowds, always begin their sales by saying, "Ladies and Gentlemen."

The whole world pays homage to certain words.

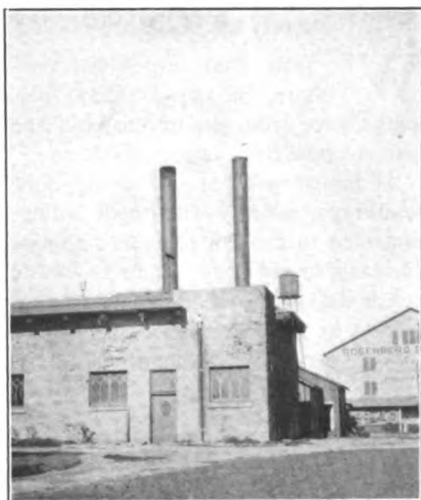
Shakespeare, centuries ago, is said to have used the word "gentleman" four hundred and fifty-two times in his works.

One frequently hears a man say that he thinks of giving up business and turning gentleman.

Is it the work a man does that makes or unmakes a gentleman?

It is not so very long ago that Great Britain barred the receiving at Court of any commercial man.

—*Wanamaker Adv.*



Municipal Gas & Electric Plant

Santa Clara, Calif.

THE smokestacks, underground pipes, and gas reserve tank holders are all protected with Dixon's Silica-Graphite Paint.

Owners of municipal gas and electric plants and others have found that Dixon's Paint is the **LONGEST LASTING** paint; once on, it defies time. It is easy to apply; it is worth far more "per gallon." It is the only paint you can trust out of sight in the hidden corners, where insidious rust and dampness begin destruction and pile up costs.

Graphite Dust Beneficial

CAN you imagine men and women going into a graphite mine or mill to "take the dust" as invalids now go to famous springs to "take the waters"?

Yet in October *Science Progress*, A. W. Davis, M.B.R.S., in com-

menting on studies which have been made in England on the occupational diseases of miners, tells us that while some forms of dust are dangerous and may lead to tuberculosis, "coal dust does not appear to have this effect, and unless breathed in very large amounts is harmless, if not actually beneficial—coal miners in England have a lower phthisis mortality than agricultural laborers."

We omit the scientific and technical reasons that are given why this is so and merely add that coal dust and graphite are each a form of carbon, the same as charcoal. In the article mentioned above, the carbon or graphite dust is said to be "stimulating," and when the carbon dust is mixed with harmful dust it renders the latter harmless.

We can now understand, as we did not before, why the workers in the Dixon graphite mines and mills are long-lived, even though they "spit blood" and are black in face and body.

Mrs. Catherine Steinhauser

1844—1920

IT is with deep regret that we announce the death, April 7, 1920, of our oldest employee, Mrs. "Kate" Steinhauser at the age of seventy-six years.

"Kate," as she was generally known, had been in the employ of the Dixon Company for seventy years, having first worked for Joseph Dixon, the founder of the Company, in 1850.

Up to the time of her death she occupied first place on the Dixon Honor Roll in length of service.

"Tire" or "Tyre"

ENGLAND and her possessions insist on spelling the word "tyre." In Canada "tire" is considered correct.

In some of the Spanish-speaking countries, such as Chili and the Argentine, tires are known as "neumaticos." But in Mexico they are "llantas." In still other places where Spanish is the language, notably Cuba, the correct word is "gomas." In Brazil, where Portuguese is spoken, the name is "pneumaticos."

The French have the short name "pneus" for tires. This is a contraction of "pneumatiques." In practically all the Scandinavian countries the Danish word "gummiringer"—rubber ring—is used.

Some of the well-known slogans of American tire firms have a strange look when carried over into other languages. The French are becoming well acquainted with the phrase "Les pneus United States sont bons pneus," and in Spain the slogan "Los neumaticos United States son buenos neumaticos" is beginning to fasten itself in the minds of motorists.

Beware of Tax Zealots!

A MEMBER of the Association of National Advertisers, in writing of the proposed tax on advertising, says: "Those of us who were in France saw the retarding effect that unwise taxation has had in that country: two-wheeled carts with horses driven tandem because some silly ass put a tax on horses driven abreast; an insufficiently lighted house because of a tax on windows."



Electroliers

City of Santa Cruz, Calif.

ABOVE we illustrate one of the many electroliers in the city of Santa Cruz, which are painted with Dixon's Silica-Graphite Paint. The longest lasting protective paint gives remarkable service under seaside conditions, great daily change of temperature, ocean fogs, and other destructive agents.

If interested, write us for long service records in your line.



You can purchase a man's labor, but you've got to cultivate his good will.

—*New Success.*

DIXON

TI-CON-DER-OGA

"Pleasing to the Fingers"

This refers to the fingers of the users of Dixon's Ti-con-der-oga, who are your customers. And what is pleasing for them to use will be both pleasing and profitable for you to sell.



JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors: A. R. MacDougall & Co., Ltd., Toronto

Graphite

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JUNE

1920

No. 6

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JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



**Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead**



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Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

JUNE, 1920

Number 6

An Efficient Executive

JOSEPH H. APPEL, advertising manager for John Wanamaker, asks executives how they get folks to do things. He believes that executive ability is nothing more or less than the ability to get the job done. He does not believe that an executive should be sweet and nice to an employee when he meets him and then, if he has occasion to write him, to put an almost unforgettable sting in his letter.

A branch manager made the statement that when he came to the general office he was received by the President as though he were a royal personage, no reception could be nicer, and when he got any letter from that President it was sure to contain some sting that made him less efficient—in fact, made him cranky enough to take it out of those who happened to be under his management; in other words, his salesmen.

At the same time Mr. Appel believes that no job can be well done without the expenditure of time and money, and the test of a good executive is the proper planning of the

various expenditures to bring results.

Mr. Appel believes further that the executive must be a man of will and of action. If he is a general, he must know the conditions and the force of the enemy; he must know through his staff all about the territory and what he is up against.

If he is a sales manager he must know whether he has the proper goods for certain territories, and if he has he should know the possibility of sales in those territories, and, knowing that, he should select the right kind of salesmen, seniors or juniors, and prepare the field for them by missionaries and advertising. In other words, he should coördinate all the forces.

A good executive, adds Mr. Appel, must also have an orderly mind, a logical mind. He cannot proceed helter-skelter. He must treat one salesman no different from another, all conditions considered, as salesmen will compare notes. The executive must be systematic in his work.

The above is only a small part of Mr. Appel's article in a recent issue of *Associated Advertising*.

The Front Cover Page

IT is said that Cardinal Mercier, on his first glimpse of the Woolworth Building, exclaimed: "What a beautiful church that is!"

It is true of all great architecture that it creates a feeling of awe and reverence in the beholder.

The Woolworth Building is certainly a splendid architectural achievement. It is a monument, not only to its architect, but to the genius and courage of the man whose name it bears, who, before he built the building, built a business as distinctive in design and as vast in extent.

Earl Horter has caught the fine lines of the structure in his ELDO-RADO drawing, reproduced on the front cover page of this issue of GRAPHITE.

Where Snow is Ice

IN Montenegro a snowball takes the place of the cracked ice in your water glass, and your blue points come to the table cunningly arranged in a little geometric design of snow cubes.

For ice is unknown in that country, according to reports from American Red Cross workers there, and packed snow takes its place.

The Montenegrins can afford to be quite improvident in the harvesting of their ice. They are not obliged to cut the summer's supply in the far-ahead cold of winter. They simply forget the ice business until the warm season is upon them. Then when the July sunshine sends down its blistering rays and lemon phosphates seem more desirable than

steak and potatoes, the ice business starts again.

The professional ice men go up into the mountains where, during the winter, the snow has become firmly packed in the ravines. They cut great blocks of hard snow which are transported by horse trains to the towns.

All the ice used by the American Red Cross hospital in Podgoritzza during the last year was obtained in this way.—*Metal Worker*.

Lincoln's Shoes

GEORGE E. KEITH COMPANY, manufacturers of the Walk-over shoes, tell us in their little house organ that Abraham Lincoln's boots were size 14. His right foot was 11½, and his left foot 11⅝ inches long. This is in accordance with the general rule that the left foot of a right-handed man is larger than the right foot. Right-handed men rest their weight on their left foot whenever they swing an axe, as Lincoln did, or a golf club, as some of his successors have done.

Shoemaking in Lincoln's time was a crude, unscientific and more or less arduous process. Shoe wearing was a source of neither pride nor pleasure. Then there were the wooden pegs to add to the gaiety of nations and the joys of simple life.

Very much more that is interesting in regard to boots and shoes is told in the January-February number of the Keith Company's house organ, *Walk-over Shoe-prints*.



WET planks are slippery material for platforms.—*The Independent*.

The Way of "Yip," the Chinese Waiter

ONE of the well known automobile salesmen in San Francisco became sick and for two days he was forced to stay abed at the Press Club. Naturally he had to eat, and the doctor told him just what Yip, the veteran club cook, could prepare for him.

The doctor wrote it down for Fuller just as he should have it. It was all soft food, easily digested, and eliminated, as doctors always do, everything the patient wanted.

"First you may have some clear soup for your dinner," said the doctor and he put it down thus:

1. Clear soup.
2. Celery root salad.
3. Oyster stew.
4. Green tea.
5. Rice pudding.

That sounded fair to Fuller, so he called a waiter. Up came Yip, all smiles and good nature, to see what the sick man would have.

Fuller started to tell the Chinese boy just what the doctor ordered and then passed him the menu the physician had made up.

Half an hour later Yip, smiling from ear to ear, struggled up the stairs and lugged into Fuller's room five rice puddings, four pots of green tea, three oyster stews, two celery root salads and one cup of clear soup.

The bill was something awful.



MOTORIST (arrested for speeding):
"A fine morning, Judge?"

JUDGE: "It is. Ten dollars."

—*The Home Sector.*



J. G. Tibbitts

WE have pleasure in presenting to the readers of GRAPHITE one of the old-time Dixon representatives, who has been selling Dixon's Graphite Lubricants and other Graphite Products in the State of New York—namely, Mr. J. G. Tibbitts. We are quite sure that the large number of our good customers who have been waited upon by Mr. Tibbitts will be glad to learn that he has been relieved of the arduous routine duties which he has so faithfully performed.

Mr. Tibbitts will now deal only with special assignments, and his first duty will be to act as godfather to our Mr. J. C. Kemp, who will aim to serve in the same conscientious manner that won respect and consideration for Mr. Tibbitts.



Keep it within your reach for constant reference.
It is the last word in print on pencils, colored
crayons, erasers and penholders.



H. H. Sullivan, Inc., Rochester, N. Y.

THE photographic reproduction of the display in the windows of the fine up-to-date stationery store of H. H. Sullivan, Inc., of Rochester, N. Y., shown above, does not begin to do justice to the display itself which was admired by the customers of this aggressive stationery concern.

◆

"So you want to be my son-in-law, do you?" asked the man, with as much fierceness as he could assume.

"Well," said the young man, "I don't particularly want to, but I suppose I shall have to be if I marry your daughter."—*Pittsburgh Chronicle-Telegraph*.

The Paper Chase

"I'LL foil them yet!" the hare exclaimed

(The hounds were at his back).

He donned a pair of rubber boots,
And thus erased his track.

—*Walk-over Shoe*.

Which reminds us that for erasing the tracks of a lead pencil one of Dixon's wedge-shaped rubbers is the acknowledged track eraser. Perhaps that is why we are some thousands of gross behind our orders.

◆

"It costs twice as much to live as it did fifty years ago."

"Well, I'd rather be paying double now than have paid half then."—*Life*.

Ornamental Galvanized Cornices and Gutters

OVER twenty years ago Anderson Brothers, contractors in Jersey City, placed an ornamental galvanized cornice and gutter on the Dixon pencil factory. The structure is over 175 feet in length and on its completion was thoroughly washed with a strong solution of soda, and then painted with Dixon's Silica-Graphite Paint.

During this period the structure has been, so far as we can learn, repainted about three times.

Anderson Brothers and Superintendent J. A. Tracy of the pencil factory are authorities for the statement that the structure is still in perfect condition through having been thoroughly protected by the paint.

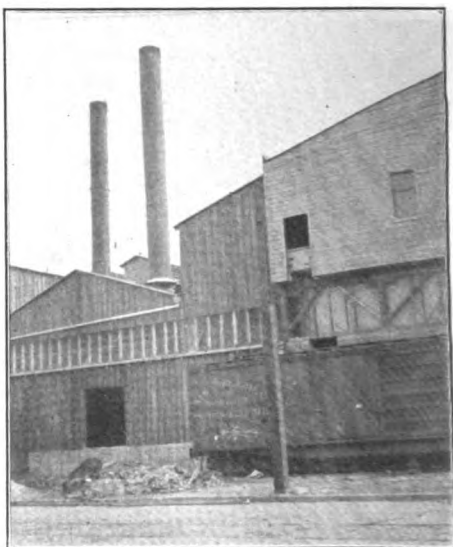
Messrs. Anderson Brothers further advise us that other galvanized cornices and gutters put on by them at the same time in this city, painted with competitive paints, have been badly corroded and in some places have had to be replaced.

There are three things that should be observed in the protection of galvanized structures. The first is that the surface should be thoroughly cleaned by some means. It is the practice of some to permit the structure to be exposed for several months to the wear of the elements, but this is not considered as good practice as it is to clean the surface thoroughly with a strong solution of ordinary washing soda.

The next thing is to make use of Dixon's Silica-Graphite Paint, using

any one of the four colors that may be chosen. This paint has a reputation of over 50 years. It goes without saying that the paint should be properly applied.

Then, according to the location of the structures and the corrosive conditions to which they are subjected, they should be repainted at proper intervals. In our own case the intervals have been about five years.

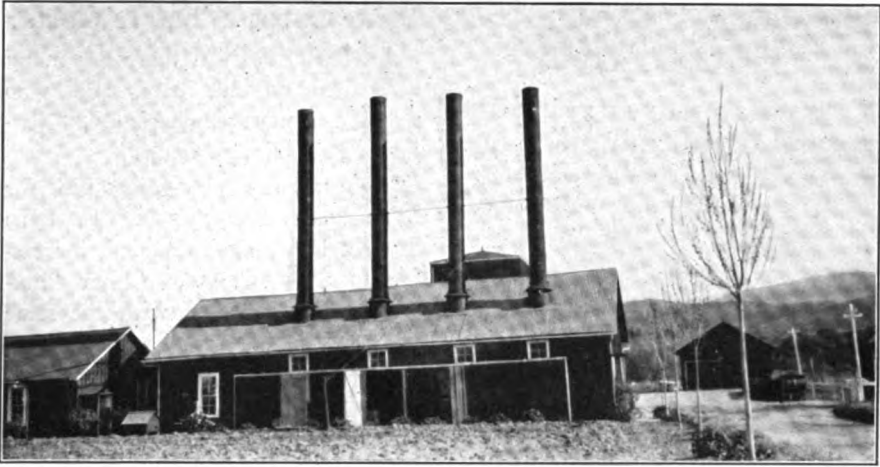


Smokestacks

California Canneries Co., San Francisco, Calif.

THE above smokestacks are painted with Dixon's Silica-Graphite Paint. The structures are exposed to sulphurous gases, fumes, and other destructive agents.

Dixon's Silica-Graphite Paint is widely used by canning concerns. The pigment is inert, pure and does not injure on contact.



Smokestacks, Pumping Station

Associated Oil Co., Salinas, Calif.

THE pumping station illustrated above is three miles out of Salinas, Calif. (Coalinga-Monterey Pipe Line Co.).

All the smokestacks are painted with Dixon's Silica-Graphite Paint.

If you desire a paint that will give you the greatest economy and the **LONGEST SERVICE**, you will do well to select Dixon's Silica-Graphite Paint at your next painting. We should be glad to correspond with you regarding your paint problem.

Use of Graphite on Type-setting Machines

THE Typesetting Machine Engineers' Journal in an article on "The Care of Spacebands," recommends the use of fine dry graphite as follows:

"After the spacebands have been thoroughly scraped with a piece of brass or some other soft material

that cannot possibly scratch the bright steel surface of the sleeve, they should be thoroughly rubbed on a perfectly flat hard wood board on which has been sprinkled a teaspoonful of fine dry graphite. Care must be taken to replace the board with a new one when it becomes worn so that it no longer presents a perfectly flat surface.

"The graphite with which the spaceband is coated serves for a double purpose. It not only prevents the metal from adhering to the slide of the casting point, but serves as a lubricant between the wedge on one side, and the matrix on the other. This wedge is subjected to a severe strain as it receives the full force of both justification levers and should there be any undue friction on the band, it is liable to bend or break."

Dixon's Graphite No. 635 is in almost universal use for this purpose. It is in fine flakes, which will readily form the desired coating.

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII JUNE, 1920 No. 6

They Don't "Buckle Down"

A CORRESPONDENT of the *Manufacturers' Record*, in giving his experience with workmen, says that it is a perfectly natural instinct with the workmen to get as much as they can for as little effort as possible, and that that instinct is perhaps a little more in evidence at present, owing to the scarcity of men who are willing to work.

He adds further that he can see no good reason for expecting labor to carry the burden of increasing production by working harder than before, when there are so many hundreds of thousands of young men engaged in the pleasant pastime of "passing the buck" and letting somebody else do the hard work. The tendency of young men, he says, is to want to wear a starched collar and boss somebody rather than to work. And that, in his opinion, is the reason of the scarcity of labor generally and mechanics, and the reason also that mechanics can demand \$1.25 per hour and get it.



THE aim (if reached or not) makes great the life.—*New Success*.

Who Cares What It Costs?

APPARENTLY there are many who do not care, and who would say most emphatically, "Benjamin Franklin, go hang!"

The nation's play-going bill for 1918 was \$263,573,388. In 1919 the bill had almost doubled, increasing to \$507,792,458. Other "luxuries" were paid for with the same generous hand.



The Greater Need

SOME day the Gideons, who see to it that there's a Bible in each hotel guest-room, are going to fix it so that the man who makes the hotel rates has one too.—*Detroit Times*.

Our Enclosure

THERE is a postcard enclosed with this issue of GRAPHITE going to our regular mailing list.

Our purpose in enclosing this card is to check up and correct your address as well as to ascertain if you wish to continue to receive GRAPHITE. We also wish to find out which of our products you are interested in so that we can properly classify your name on our lists.

Only by your co-operation in filling out this card and returning it will this canvass be a success, and we know that you want it to be.

Please do not think that your card need not be returned as others will. If all feel that way none will be returned.

Your attention to this matter will be greatly appreciated.

When

WHEN in the silence of the night,
When darkness hugs the world so tight,
When all is hushed and quiet with sleep,
Then haunting memories round me creep;
When I can spend that hour alone
And find the man I've never known;
When I can meet him face to face
And there commune with ME apace;

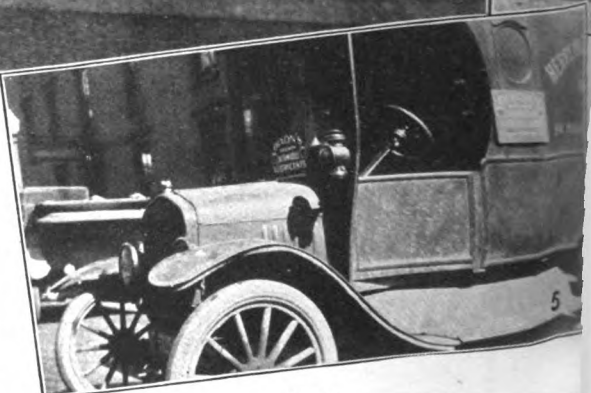
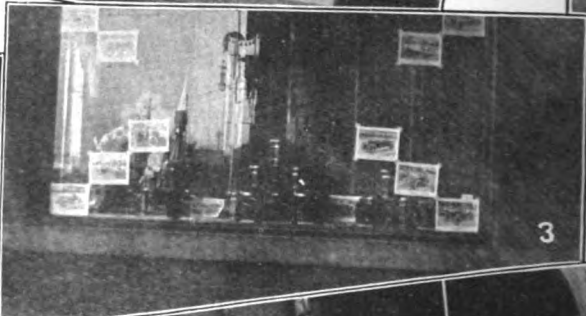
When I can take myself in hand
And measure up just how I stand;
When I can gaze into my heart
And see my worth upon life's chart;
When I can look back o'er the road
And count the times I've shirked my load
And estimate the hours I've spent
On things that were not permanent;

When I can realize the crime
Of spending worthlessly my time;
When I can call things by the name
I ought to, and accept the blame;
When I can place where it belongs
The reason for my countless wrongs;
When I can pile in one great heap
My faults, the harvest I shall reap;

Then knowing what I am can say,
"From this time onward, from today,
"I'll work and serve and will to win
"To mould a better man within";
So, when I turn the searchlight on,
The faults I had will all be gone,
And there shall stand revealed to me
The man God meant that I should be.

JAMES H. HERON

[Copyrighted by James H. Heron, Orange, N. J.]



"Window Displays Dur



Dixon Week in Cincinnati

THE group of illustrations in the center spread of this issue of GRAPHITE shows some of the window displays of Dixon's Gear Lubricant during Dixon Week in Cincinnati, May 5th to 8th.

Dixon Week in Cincinnati was put over by our representative in that territory, Mr. R. Rochefort, with the assistance of our various dealers there. Through their co-operation and hearty support Dixon Week was a success for all concerned.

The illustrations represent:

1. Main Auto Supply Co.
2. Close-up View of Main Auto Supply Co.
3. F. & N. Motor Co.
4. Auto & Aero Supply Co.
5. Truck of Main Auto Supply Co.
6. Ohio Rubber Co.
7. R. Rochefort.
8. Times Square Auto Co.
9. Close-up View of Times Square Auto Co.
10. C. & D. Auto Supply Co.
11. Cincinnati Auto Co.
12. C. & D. Auto Supply Co.

Note particularly in photos Nos. 8 and 9 and 10 and 12, which show how goods were taken from the windows to fill calls for Dixon's Gear Lubricant.

These photos show what can be accomplished by a dealer in making window displays and using only the cans, photos of racing drivers and other material which we are glad to send for such use.

The value of displays is demonstrated by the increased orders for Dixon's Gear Lubricant. In the case of the Cincinnati dealers, all report increased sales to both old and new users. The same can be accomplished by any dealer willing to devote his window to this purpose for a short time.

Lessons Taught by Racing

THE popularity of automobile racing is due not only to the intense excitement created by the thrilling sport, but also to the fact that motor-car men realize the extent to which it has hastened the solution of many puzzling automobile problems.

The matter of lubrication is a striking instance of this. Because of the great speed at which they are driven, racing cars present, in a magnified way, the truth about friction that exists in cars in normal use. Both engineers and car owners are sharing in the lubricating lessons taught by experience of the speed kings.

It is a significant fact that the winning American and foreign drivers are practically unanimous in selecting Dixon's Lubricants for their transmissions and differentials. This popularity is attributed to the fact that Dixon's cannot "squeeze out" even under the tremendous pressure to which gears and bearings are subjected at tremendous speeds.

There has not been a record made for speed or endurance by any car without Dixon's Lubricants.



Her Cleverness

"DADDY," asked little Willie, "why is a black hen cleverer than a white hen?"

"I give it up," said daddy.

"Because a black hen can lay a white egg," said Willie, "and a white hen can't lay a black egg."—*New Success*.



Smokestack

Coast Counties Gas & Electric Co.,
Watsonville, Calif.

THE smokestack illustrated above was "Dixonized," which means that Dixon's Silica-Graphite Paint gives **BEST** and **LONGEST** protective service under hardest conditions of heat, salt air, change of temperature, gases, sand and wind attrition.



"I CAN tell you," said he, "how much water runs over Niagara Falls to a quart."

"How much?" asked she.

"Two pints."—*Christian Advocate*.



Natatorium

Beach Hotel Company, Santa Cruz,
Calif.

THE steel girders shown above are exposed to salt water and steam conditions. Dixon's Silica-Graphite Paint was selected by the owners because of the severity of the conditions obtaining.

We can tell you of other places where it has been used under similar conditions. If interested, write us.



A MAN feels awfully rich when he's got a few dollars his wife doesn't know about.—*New Success*.

"The Guide Post"



"GUIDE Right" is a good motto for School authorities and for dealers in School Supplies.

We think a Guide Post should always insist on "guiding right." In this righteous mood, we point out,—

very briefly, indeed,—in this, the last month of the school year, certain Dixon materials for writing and drawing in Schools. The range of their usefulness runs from the needs of little Willie, or Mary, as the case may be, in the First Grade, all through his, or her, School career, until, before a proud and perspiring audience, he, or she, having completed a College or University Course, is ready to do battle in the Business World.

For the First Grade Pupil

A child's earliest attempts at writing show that it is easier for him to make large letters than small letters. Dixon's "Beginners'" No. 308 leads the pupil at the start to write easily and naturally.

Its size and balance are perfect for this work.

For Second Grade Pupils

The in-between size "Special Black" pencil makes writing easy for Second Grade pupils.

For Grammar Grades and High School

If a rubber tipped pencil is your choice, Dixon's "Ticonderoga" No. 1386, with its pleasing-to-the-fingers shape, Dixon's "Anglo-Saxon" hexagon, Dixon's "Anglo-Saxon" round, and Dixon's "Cabinet" No. 720—all containing the No. 2 degree of hardness—are recommended; if a pencil without tip, Dixon's "High School" No. 981, Dixon's "Modern Writing" No. 1220, or Dixon's "Metropolitan" No. 739.

All of the pencils mentioned in the foregoing list are recommended for writing.

For drawing, the following are recommended:

From First Grade to High School

Dixon's "Special Black" No. 312.

For High Schools, Technical Schools and Colleges

For both mechanical and free-hand drawing, we recommend Dixon's ELDORADO—"the master drawing pencil," as the standard which leading architects, artists and engineers are using.

The student who learns to work with Dixon's ELDORADO will work much better and with less fatigue.

Its seventeen leads, from 6B to 9H, completely serve the whole range of uses of a lead pencil in the Arts and Industries.



"We need some new rugs."

"Don't we need blankets more?"

"Yes, but who sees blankets?"—

Boston Transcript.

Of Interest to the Stationery Trade

THE third edition of the recommended price list issued by Taylor B. Wyrick, Chairman of the St. Louis Stationers Association, is just off the press. This list is very comprehensive and covers all the selling lines in the average stationery store. It is in loose leaf form, pocket size, and revisions are issued as soon as price changes are received. This book is of exceptional value to stationers in the Middle West, keeping them posted on all changes made by manufacturers. If interested, communicate with Mr. Wyrick, Central National Bank Building, St. Louis, Mo.

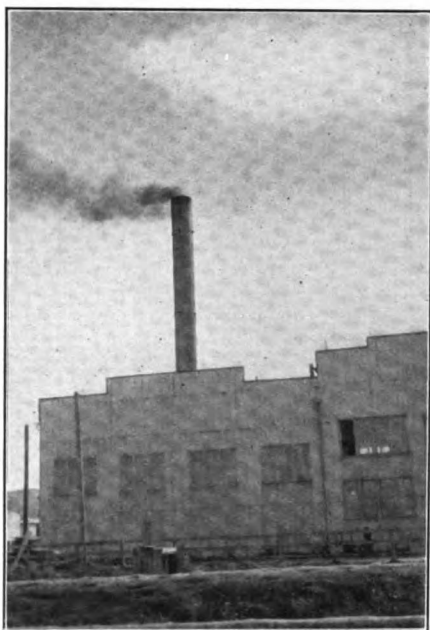
Lincoln on Bolshevism

THE following is taken from an address by President Lincoln to a committee of workingmen:

"The strongest bond of human sympathy outside of the family relation, should be the one uniting all working people of all nations and tongues and kindred. Nor should this lead to a war upon property, or the owners of property. Property is the fruit of labor; property is desirable; is a positive good in the world. That some should be rich shows that others may become rich, and hence is just encouragement to industry and enterprise.

"Let not him who is houseless pull down the house of another, but let him work diligently and build one for himself, thus by example assuring that his own shall be safe from violence when built."

—*Hardware World.*



Gas Plant

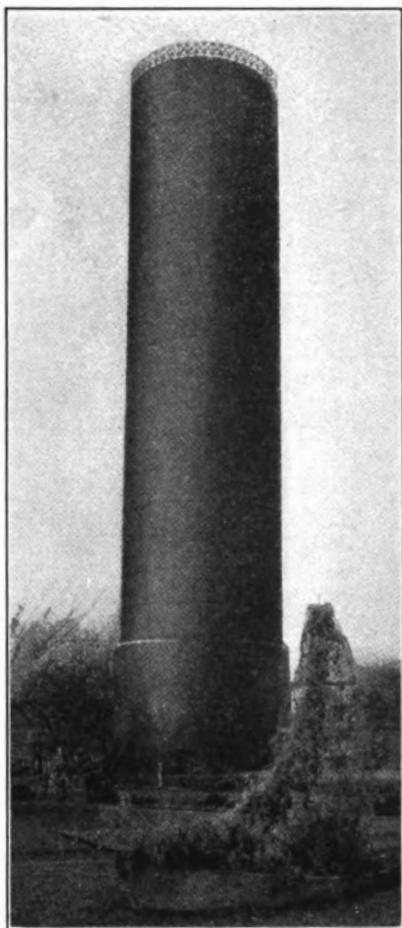
Coast Valleys Gas & Electric Co.,
Monterey, Calif.

THE smokestacks and other metalwork requiring protection are protected with Dixon's Silica-Graphite Paint. The plant is exposed to oceanside conditions, but no service is too severe for Dixon's Paint.

If you have not purchased Dixon's Silica-Graphite Paint in the past, try it out at your next painting. It will pay you to investigate its long service merits.

We will gladly send to those interested our booklet, "Painting the Smokestack." ♦

LET a man get the idea that he is being wronged, or that everything is against him, and he cuts his earning capacity right in two.—*New Success.*



Standpipe, The Marion Water Co., Marion, Ohio

Thirteen Years' Service

THIS is an ideal picture of art and utility combined. The attractive standpipe of the Marion Water Company is 95 feet high and 25 feet in diameter.

Dixon's Silica-Graphite Paint has given thirteen years' service on the lower section of this standpipe and

will give a longer service than that on the upper section.

The competitive paint used previous to the use of Dixon's Paint gave only two years' service.

The standpipe was painted on the interior and exterior with Dixon's Silica-Graphite Paint in 1902, and again in 1907, and after 13 years' service, in 1920 only 25 feet at the bottom needs repainting.

We quote the testimonial of Mr. Geo. W. Wysall, who is one of the best-known superintendents among water companies:

"We have your letter of March 25 relative to repainting our standpipe again with Dixon's Silica-Graphite Paint.

"The records indicate that the last application of your paint to our standpipe was in 1907, and while we have not made an examination of the inside, the appearance of the outside indicates the possible need of paint on about 25 feet of the bottom. The remaining 70 feet, examined with the glass, appears to be in just as good condition as when it was applied, so that during the summer it is our intention to repaint the bottom 25 feet with same material applied in 1907."

◆

A LITTLE girl was asked, upon her return home, how she liked the singing of the congregation in the church.

"I liked it very much," she said, "though all the people said it was bad."

"All the people said it was bad! What do you mean, my dear?"

"Oh, it was so bad that I heard the people praying, 'Lord, have mercy upon us miserable singers'."—*Tit-Bits*.

Proper vs. Improper Use of Belt Dressing

BELT dressing of the right kind, used with the same care and attention that would be given to bearings and the adjustment of machinery, will save money for any mill or factory, not alone in longer belt life and less trouble, but in increased horsepower.

Belting varies in construction and material and a dressing that will benefit one kind of belting is liable to prove injurious to another. Working conditions also vary and in order to get the best results from the use of belt dressing, these conditions must be taken into consideration.

Belt dressing should contain strictly neutral elements and give adhesion through increasing the softness and pliability of the belting. This means greater life for the belt, much more so than ordinarily supposed.

A loose running belt will deliver the load without slippage and will outwear the same belt running tight, at the same time being much easier on the bearings. The right belt dressing will accomplish this result.

—*Belting and Transmission.*



Mother's Art

It was in the drawing class at the school.

"Sargent was a great artist," said the teacher. "With one stroke he could change a smiling face into a sorrowful one."

"That ain't nothin'," piped up Johnny. "Me mother does that to me lots of times."—*Chicago News.*

This Letter Speaks for Itself

AFTER all is said and done, the best recommendation that can be given any article is the unsolicited testimonial of a satisfied user.

The same is true of Dixon's Graphite Lubricants, and the following letter speaks for itself in far stronger terms than we ourselves could put it:

April 8, 1920

Gentlemen:

I thought it would be of value to you to know what my experience has been during my time using your Graphite Automobile Lubricants.

For the past four or five years I have been a continuous user of Dixon's Nos. 677, 676, 675, 680, Nos. 3 and 5 Cup Grease and Motor Graphite. I can say from experience that they are genuine 100% Lubricants. I have been the distributor of the Oakland and Chevrolet pleasure cars and Republic trucks and I always lubricate them throughout with Dixon's Lubricants.

I am more than pleased to say that I have never had a come-back from a customer to replace a ball or roller bearing or to put in any new gears from poor lubrication. So I strongly recommend Dixon's Graphite Lubricants to all car owners as 100% Lubricants.

Wishing you the best of success and hoping this letter will be of value to you and that our business relations continue for many years to come, I remain,

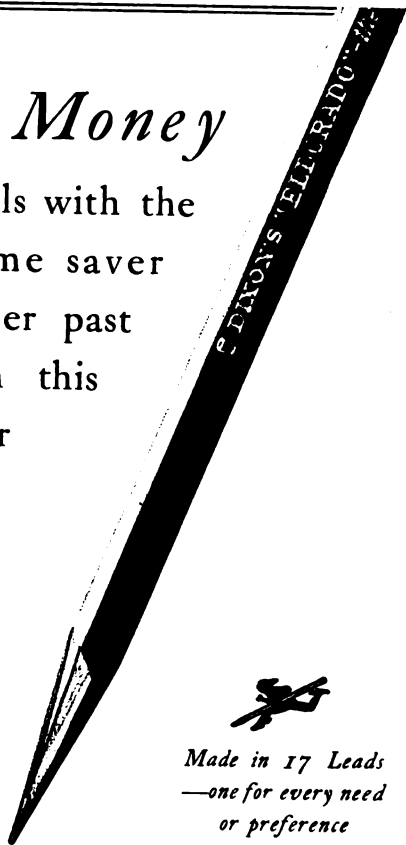
Yours respectfully,

JOSEPH L. DALY, INC.

(Signed) Joseph L. Daly, Pres.

Time and Money

The article that sells with the least effort is a time saver and a money maker past all others. From this standpoint consider



**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.

Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto

St. Louis Convention National Manufacturers' and Stationers' Association

Those of the Trade who are planning to attend the Convention of the National Manufacturers' and Stationers' Association to be held in St. Louis during the week of October 10th, will be interested in the following announcement giving the names of the Committees formed by St. Louis stationers to take care of the Convention.

PROGRAM COMMITTEE

Geo. M. Spalding
Chairman
A. J. Bartens H. J. Wantz

AUTOMOBILE COMMITTEE

F. K. Adams
Chairman
H. A. Vanderslice Geo. E. Dyson

RAILROAD COMMITTEE

Geo. E. Dyson
Chairman
A. J. Bartens V. P. Spalding

BANQUET COMMITTEE

Warren Skinner
Chairman
A. B. Lewis R. G. Craig

FINANCE COMMITTEE

Chas. M. Skinner
Chairman
Robert T. Deacon C. B. Osgood
Wyatt Shallcross Warren Skinner

PUBLICITY COMMITTEE

Wm. Schmeiderer
Chairman
C. R. Comfort W. K. Woods
Taylor B. Wyrick A. B. Lewis
Warren Skinner

"GET TOGETHER" NIGHT COMMITTEE

H. A. Vanderslice
Chairman
K. E. Chase A. L. Meyer
F. H. Wielandy

GOLF COMMITTEE

Geo. B. Gannett
Chairman
H. J. Wantz E. L. Skinner
Celsus Orear

HOTEL COMMITTEE

Wm. J. Kennedy
Chairman
Geo. M. Spalding F. W. Palmer
H. R. Dotterer

Fat Men

"IT may be envy on the part of the thin men of the Dixon Company, that they ask us to print the following by George Fitch:

"A fat man is a man who thanks Providence and is happy whenever he weighs a pound less than he did a month ago.

Fat men are globular in shape and wear collars that look like a draw string. They have legs and feet like other men, but have to take someone else's word for it. If a really fat man were to meet his own feet on the street he would pass them by as strangers.

Some men weigh 300 pounds and are not fat, while others weigh 200 pounds and brush buttons off on both sides working their way through the dining-room door. It all depends upon the height. If a man gains six inches when he falls down he is genuinely fat and should not be joked about it.

Fat men come in odd shapes and are usually not artistic. They bulge in peculiar places like a Turkish mosque and when a tailor starts a suit for a pear shaped patron he plots out its curves with a wagon tire. There is nothing more pathetic than a pair of pants which have just been completed for a man who wears two-bushel socks. They look like a pair of knee breeches for Goliath.

The fat man leads a timid and worried life. He is always thinking about thin-legged chairs and elevator cables and when he sits down in a street car he knows that he is being hated by three people who are standing. Doing a heavy freight business

as he does, he is unable to walk far and no bed has been invented that will hold up a fat man who is a good free sleeper without getting tired and letting him down occasionally.

The fat man enjoys winter, for even the coldest days can't get through him until 4 P.M. But in April he begins to melt and by July he has to mop his face with a rubber window-cleaner every five minutes. When a fat man becomes incandescent all the way through he consists of pure misery, especially if he is too polite to wear a collar button and carry the rest of his neck harness over his arm.

In spite of all his troubles, the fat man is genial and good-natured and is usually approached fearlessly by book agents. There is no greater hero than a 350-pound man with a dark red, overhanging neck laughing steamily on a hot July day as he jokes about the weather."

Chinese Proverbs

"THE error of one moment becomes the sorrow of a whole lifetime."

"If the roots be left, the grass will grow again." (This is the reason given for exterminating a traitor's family.)

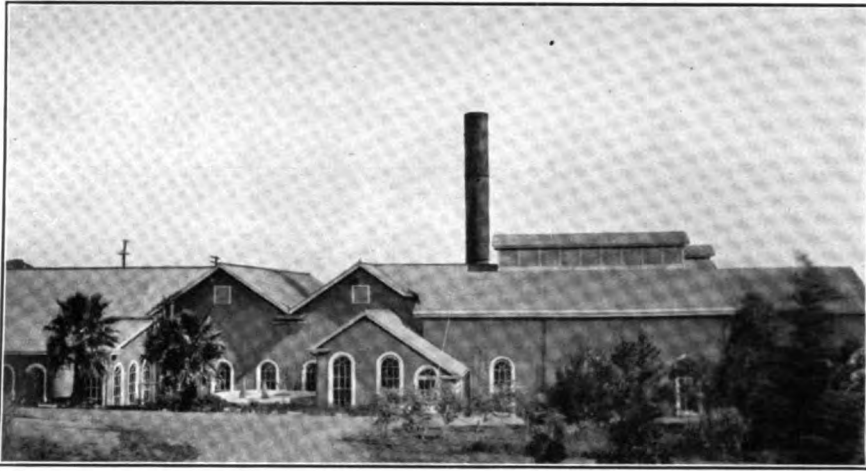
"The gem cannot be polished without friction, nor the man perfected without trials."

"Eggs are close things, but the chicks come out at last."

"To win a cat and lose a cow." (Consequences of litigation.)

"Those who cannot sometimes be deaf are unfit to rule."

—*Science Siftings.*



Pumping Station

Spring Valley Water Co., Belmont, Calif.

THE Spring Valley Water Company supplies San Francisco with water. All of their buildings, including smokestacks, are painted with Dixon's Silica-Graphite Paint which lasts longest and is the most popular protective paint with water companies.

If you have not been a user of Dixon's Silica-Graphite Paint in the past, try it when you are next in the market. You will find no paint to equal it in long and effective service. Its reputation for economy covers over a period of 50 years. It is made in **FIRST QUALITY** only.



Near-Chicken

DINER: "What on earth is this broth made from, waiter? Surely it isn't chicken-broth!"

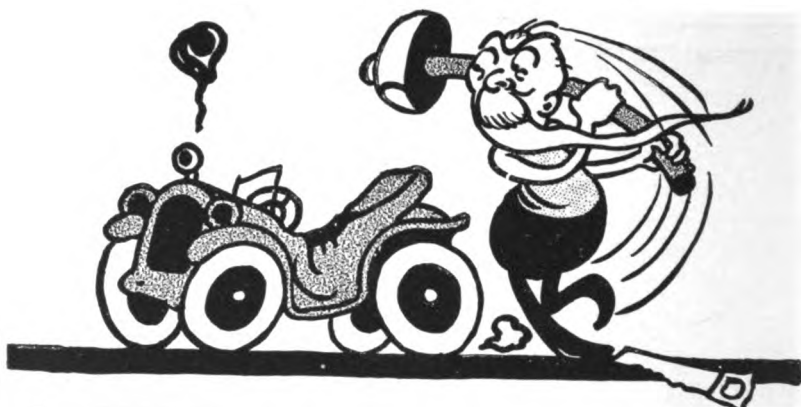
WAITER: "Well, sir, it's chicken-broth in its infancy. It's made out of the water the eggs were boiled in."

—*London Tit-Bits.*

Picnics

THE time is now close at hand for picnics. According to a well-known writer:

"A picnic is composed of people and lunch in equal parts. It is usually several days in incubating and coming to a head. It takes three days to prepare the lunch for a picnic of the first grade, three hours to find a satisfactory spot on which to lay it out and thirty minutes to make it look like the contents of a pie wagon that has been struck by an automobile. As in the bringing up of children, women do most of the work at a picnic. They prepare the lunch, pack the baskets and persuade the men to come. There is also one woman in each picnic who clears up the remains and washes the dishes. She is indispensable and the picnic cannot exist without her. Some towns have gone picnicless for years because their last willing picnic worker has retired."



Is Old Man Friction At Work on Your Car?

He's a destructive old cuss, is Friction. Once he gets in his work you're up against excessive wear, noise and trouble. Not to mention growing costs!

That's why it's so important that you use Dixon's Lubricant.

DIXON'S Gear LUBRICANT

Ask for Dixon's 677. Also, the famous Dixon's Cup Grease and Other Dixon Lubricants. They all come in snappy red cans.



Friction hasn't a chance with Dixon's on the job. In fact, the heavier the pressure the more firmly Dixon's works into the minute irregularities you'll always find on gear and bearing surfaces. It can't "squeeze out." So you get a permanent, smooth, slippery film that sweetens up the action of your car, lengthens its life and cuts down noise and expense.

And here's another important advantage. Dixon's is not affected by heat or cold like plain grease or oil.

Your dealer will tell you why Dixon's Lubricant is best for your car. Ask him.

JOSEPH DIXON CRUCIBLE COMPANY

Established 1827

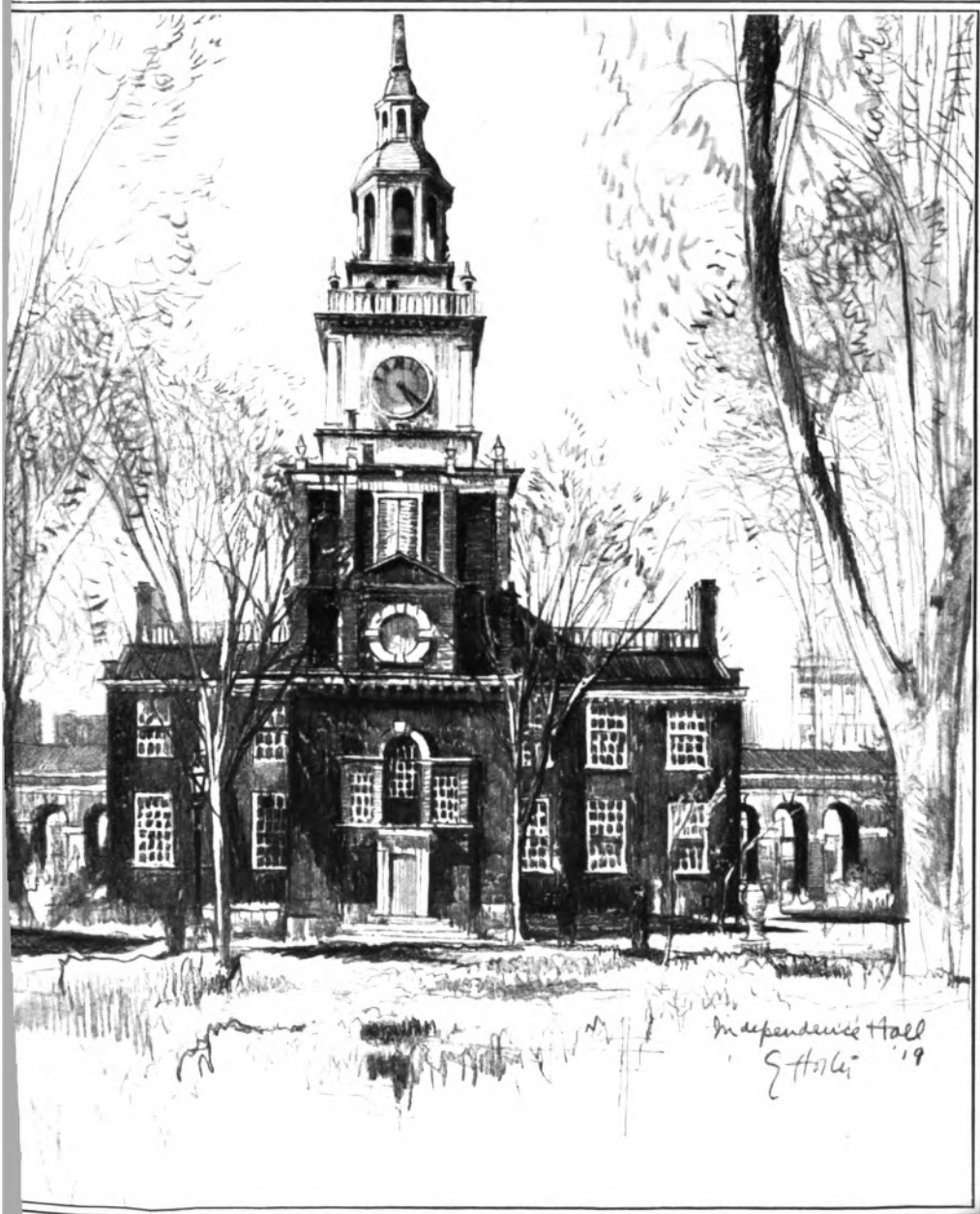
Jersey City, New Jersey

Graphite

VOL. XXII

JULY, 1920

No. 7



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



**Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead**



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FOR ALL PRODUCTS EXCEPT PENCILS, CRAYONS AND ERASERS

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44 Whitehall St., New York, N. Y.

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H. GLYDE GREGORY, Royal Bank Bldg., San Juan, P. R.

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Siberia

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Philippine Islands
India, Dutch East Indies
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CANADIAN ASBESTOS COMPANY, Montreal, Quebec, Canada

Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

JULY, 1920

Number 7

Independence Hall

PHILADELPHIA has much to be proud of in Independence Hall. And the whole country is happy because of the care which is given to it by the City Fathers of Philadelphia.

The building runs from 5th to 6th Street on Chestnut, where the entrances are situated. To the rear is a beautiful park, kept in perfect condition. Looming up on the southward, on 6th Street, is the magnificent building of the Curtis Publishing Company. Two extremes of architecture are thus seen together, within a stone's throw of each other. The new building, the Penn Mutual Life Insurance Company, towers in the south: in truth, on all sides "the setting is worthy of the gem."

The plate on the building tells the story of its participation in the foundation of the Republic:

Declaration Chamber

"HERE the Continental Congress sat from the date it convened, May 10, 1775, until the close of the Revolution, except when in 1776-77

it sat in Baltimore, and in 1777-78 in Lancaster and York, due to the temporary occupation of Philadelphia by the British Army.

Here on June 16, 1775, George Washington accepted his appointment by Congress as General of the Continental Army.

Here on July 4, 1776, the Declaration of Independence was adopted and on July 9, 1778, the Articles of Confederation and perpetual union between the States were adopted and signed.

Here on November 3, 1781, twenty-four standards taken at the surrender at Yorktown, were laid at the feet of Congress and his Excellency, the Ambassador of France.

Here on September 17, 1787, the Constitution of the United States of America was adopted and signed."

And herein hangs the bell—the Liberty Bell—which proclaimed "liberty throughout the land and to all the inhabitants thereof," rung, as the legend runs, by an aged sire, at the word of his grandson, when the

momentous vote on Independence had been taken, "that these are, and of right ought to be, Free and Independent States"—on the day we celebrate, the Fourth of July, 1776.

The quaint beauty of the building is very effectively rendered by Mr. Earl Horter in the drawing on our front cover.

Withdrawing Salesmen from Field Work

BABSON'S Statistical Organization has been interested in the above matter, and, in a letter to the editor of *Printers' Ink*, asked for information which might show what various sales organizations were doing to keep their salesmen most advantageously employed in cases where the concern is oversold. In reply, *Printers' Ink* has the following to say:

"At a time when many firms are oversold and salesmen retained merely to promote good will and safeguard the future, their activities can be directed along many profitable channels. They can help to furnish facts for retail clerks' manuals, put into available form the most ingenious methods of displaying merchandise, deliver and display dealer helps and store trims, stage store demonstrations, offer suggestions for new uses of the product, give the financial man the human history of credit risks in their territories, etc.

Some months ago *Printers' Ink* published an interview with H. A. Beach, manager of the Travelling Department of the Victor Talking

Machine Co., entitled, 'A Sales Force That Doesn't Solicit Orders.' This article explained that the prime requisite of a Victor salesman is not the ability to sell more merchandise but to assist the retail dealer to sell more.

While trade conditions may **not** make such a plan adaptable **for** every business, still present conditions give the salesman **leisure** which permits him to turn his **talents** to a variety of trade-stimulating purposes. It not only **helps** the organization to a more **solid** footing with its trade, but gives the salesman a better realization of the fact that he represents his **firm** in every branch of its business **activities** and that his value to the **organization** is not measured alone **by** volume of sales."

Other readers of *Printers' Ink* faced with similar problems **will** doubtless find constructive help **by** reading some of the articles **which** have appeared on this subject **during** past months.



Insanity to Cover One More Sin

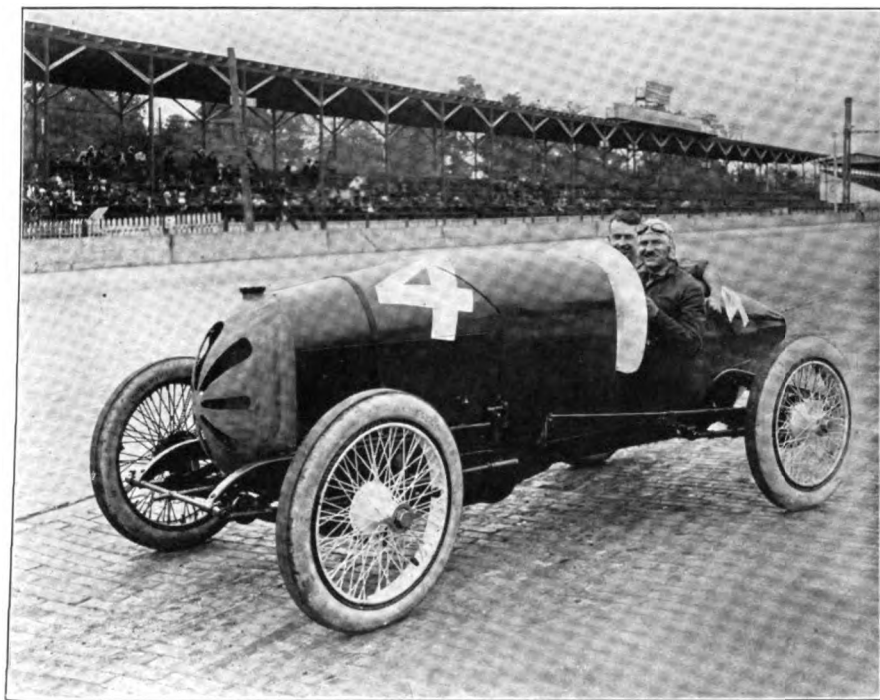
THE House of Lords contemplates making insanity a cause of **divorce**. Hitherto it has only been recognized as a cause of marriage.

—*London Opinion*.



SELF-CONTROL will succeed with **one** talent where self-indulgence will **fail** with ten.

—*New Success*.



Gaston Chevrolet, Winner of Indianapolis Race

IN the most spectacular finish ever witnessed on the Indianapolis Speedway, Gaston Chevrolet, driving a car of American design, rode to victory in the 500-mile race held there May 31st. The car, a Monroe, was designed by his brother Louis Chevrolet.

His time was an average of 88.16 miles per hour, the second best time in the history of the event.

Driving a consistent race, Chevrolet was never below fourth place and most of the time was in either second or third.

The race this year proved to be one of the severest lubrication tests ever known because the high speed

was a terrific strain on the smaller sized cars required by this year's regulations. Consequently the moving parts worked under a tremendous pressure.

It is a significant fact that the winning car, as well as all but one of the cars to finish, was lubricated throughout with Dixon's Lubricants.

Gaston Chevrolet, the winner, says:

"Under the strain of racing more lubrication trouble develops than in any other way. Because I do not wish to have this trouble I always lubricate my car with Dixon's Graphite Automobile Lubricants."



1. G. R. Lathrop, Manager, St. Louis News Co. 2. Charles H. Kimpton, Kimpton-Haupt Co.
 3. Wm. G. Whittemore, Manager, Stationery Dept., American News Co.
 4. H. A. Vanderslice, St. Louis District Representative, Joseph Dixon Crucible Co.
 5. R. M. Griffin, Manager, Tower Mfg. & Novelty Co.

Wholesale Stationers Meet in St. Louis

OUR St. Louis District Representative, Mr. H. A. Vanderslice, sends us an interesting report of the Convention of the Wholesale Stationers' Association, held in St. Louis, May 17th to 19th last.

This report reached us too late for the June issue of GRAPHITE; and before the present issue left the press a number of the trade papers had dealt with the Convention. Nevertheless, it is a genuine pleasure to reproduce, at the head of this page, a picture, taken at the Algonquin Golf Club, of those members of the Association who enjoyed themselves

at the ancient game on one of the days of the convention.

Mr. Vanderslice, in his pleasant account of the affair, refers to it as "golf tournament," meaning thereby no doubt, that the quality of the game displayed by these gentlemen made it worthy of exhibition among a large number of contestants.



Looking Up

"So you want to marry my daughter. What are your prospects?"

"Well, sir, I have a wealthy bachelor uncle, sixty-five years old, who has just taken up aviation."—*Life*.

Making Less Variety

THE J. Walter Thompson Company, advertising agency of New York, tell us that there are 150 distinct kinds of tooth brushes catalogued by a wholesale house; that more than 40 variations of one food item is prepared by one single company. We are told further that in every type of manufactured articles countless variations of size, style and color have built up elaborate and costly lines. Suggestions of salesmen, the demands of jobbers, whims of consumers have added one modification after another. For these manufacturers, the American market is highly complex and difficult to deal with.

Yet there are manufacturers in the same fields who find the market simple—without any of these whims.

A toilet goods corporation less than five years ago was making a line of 21 different articles. To-day the total volume is twenty times as great, and the line has been reduced from 21 items to 10.

A company making shoes does 95% of its business on a standardized, trade-marked line. Ten years ago this line represented only five per cent. of the annual output.

Another firm making a special type of food product to-day dominates that entire field.



Good Reasoning

PARENT—"What is your reason for wishing to marry my daughter?"

YOUNG MAN—"I have no reason, sir; I am in love."

—*London Opinion.*



Smokestack

George H. Hooke, Watsonville, Calif.

ALL the smokestack and other metalwork around the plant shown above is painted with Dixon's Silica-Graphite Paint.

Mr. Hooke, like many other canning concerns, has found that it pays to use a paint that longest resists the weather, gases, alkalies, dampness, and other deteriorating agents.



The Difficulty

"Do you think, dearest, that you could manage on my salary?" the fond youth asked.

"Why, yes; I think I could, darling," the girl responded; "but how in the world would you get along?"

—*The Home Sector.*



Smokestacks

Union Ice Company, Newark, N. J.

THE smokestacks shown above were painted by Steeplejack R. J. Chamberlin, of Newark, with Dixon's Silica-Graphite Paint.

They are subject to the conditions of steam, as well as smoke, heat and cinders. The best contractors and the best industrial concerns use the best protective paint, which is Dixon's Silica-Graphite Paint.

Don't quibble about the "per gallon" price. Think of longer months and years of service when Dixon's is used.

The 'Matter With America'

C. E. KNOEPEL, President of C. E. Knoepfel & Co., Inc., of New York, in an address on "The Future of Industrial Engineering," quoted the following:

"What's the matter with America these days?

Too many diamonds, not enough alarm clocks.

Too many silk shirts, not enough blue flannel ones.

Too many pointed-toed shoes and not enough square-toed ones.

Too many serge suits and not enough overalls.

Too much décolleté and not enough aprons.

Too many satin upholstered limousines and not enough cows.

Too many consumers and not enough producers.

Too much oil stock and not enough savings accounts.

Too much envy of the results of hard work and too little desire to emulate it.

Too many desiring short cuts to wealth and too few willing to pay the price.

Too much of the spirit of 'get while the getting is good' and not enough of the old-fashioned Christianity.

Too much discontent that vents itself in mere complaining and too little real effort to remedy conditions."



Hints for the Home

AN outworn Ford body, bent to a new design and covered with cretonne, makes a cute umbrella-stand for the hall.—*Detroit Motor News.*

National Advertising of Branded Products Helps Dealers

DEALERS are coming more and more to appreciate the value to themselves of advertising done by manufacturers of branded products.

In fact the most foresighted of them are virtually concentrating their sales on advertised products.

They recognize that the manufacturers' advertising is being used to educate their own customers.

Manufacturers' advertising is a real help to the dealer. It stimulates trade, by maintaining a healthy demand for the goods without the necessity of price cutting, a pernicious practice common in unadvertised lines to keep sales up.

The dealer has much to gain by manufacturer-advertising. In fact he may consider himself a partner in the advertising.

This partnership is worth much to the dealer who is shrewd enough to see this relationship and utilize it by keeping the advertised goods on display and otherwise backing the advertising.

Manufacturers realize that they cannot force distribution to the consumer against dealers' will. They need the hearty coöperation of dealers in getting products into the hands of the consumer, for the normal way from factory to consumer is through dealers.

The retail store may be regarded as the vital point in the channel through which trade passes from factory to consumer. All trade which passes through the channel must pass through this particular part of the channel. No more trade can pass through the channel as a whole than can pass through its narrowest point.

Any action of the manufacturer injurious to the dealer would tend to narrow the channel at this point and hence to restrict the volume of flow from the factory. Conversely, any move which is beneficial to the dealer tends to broaden the channel at this point—tends to lessen the resistance here so that a greater volume of trade may flow from the factory.

Manufacturers realize these facts. Hence the whole purpose of manufacturer-advertising is to lessen resistance to the flow of trade—to broaden the channel at all points—to help dealers!

Advertising benefits the manufacturer by benefiting the dealer at the same time, and **ONLY** by benefiting the dealer.

The wise dealer links his store with the manufacturers' advertising by using the columns of his local newspaper to tell the community that he can supply right at home the products advertised.—*Building Trade with Farmers.*

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII JULY, 1920 No. 7

Individual Preparedness

IT was not so very long ago that there was widespread wailing and gnashing of teeth at our national unpreparedness. Amazement and disgust were widespread. The virtues of being ready were sung as with one voice.

But what of individual unpreparedness? Is it true that in our daily lives as individuals most of us are as remiss in preparedness as was the nation at large?

No day passes without astonishment at somebody else's neglect in some commonplace but important matter, yet most of us would be found equally remiss if put to the test.

There is a best way to meet each emergency. It is the few who are ready, the many who are unprepared. "Why didn't I have sense enough to do so and so?" is the common remark when it is too late, the sequence of unpreparedness in thought or act.

How many of those who read this, men or women, old or young, always carry with them identification cards or memoranda giving information necessary in case of accident or incapacity when among strangers?

How many of those who read this know the chief principles of first aid?

How many of those who read this know what antidote to give if a child should swallow something poisonous?

How many of those who read this have thought out the necessary and sensible things to do at once in case of a fire at home, or anywhere else?

How many of those who read this would suffer financial loss in case of a fire?

How many of those who read this have decided what they would do if burglars are discovered in the house?

How many of those who read this, who are heads of families or property owners, have made a will?

Additional emergencies might be suggested, but those mentioned will serve. The question is, Are you prepared?—*Three Partners.*



Nuggets

THERE is no "impossible" for the man who can will strong enough and long enough.



THE sun never sees the dark side of anything.



EVERY time you crowd into the memory what you do not expect it to retain, you weaken its powers, and you lose your authority to command its services.



THE whole face puts on mourning for the death of self-respect.



YOUR ambition, not our worded prayer, is your real creed.

—*New Success.*

Ask Yourself—

Am I hitched up right, or am I a round peg in a square hole?

Do I feel every drop of blood and every fibre in me tugging away at my ambition, saying "Amen" to my work?

Am I backing up my chance in life in every possible way, or am I sliding along the lines of least resistance?

Am I keeping myself fit to do the biggest thing possible to me every day of my life?

Am I working along the line of my talent, or am I getting my living by my weakness instead of my strength?

Am I strengthening my weak points, making my strong points stronger, and eliminating the things which are keeping me back, the enemies of my success?

Do I decide things quickly, finally, or am I forever on the fence, fearing to make definite decisions which I cannot reconsider?

Have I the initiative which begins things without being told to; which does things without waiting for others' instructions?

Do I dare to attempt the thing I instinctively feel capable of doing, and I know that I ought to do?

Have I the courage which dares to branch out in an original way, dares to make mistakes that may humiliate me if I should not happen to succeed?

Do I try to develop that bigger man back of the smaller man I am, by obeying the God-urge that ever bids me up and on to greater endeavor?

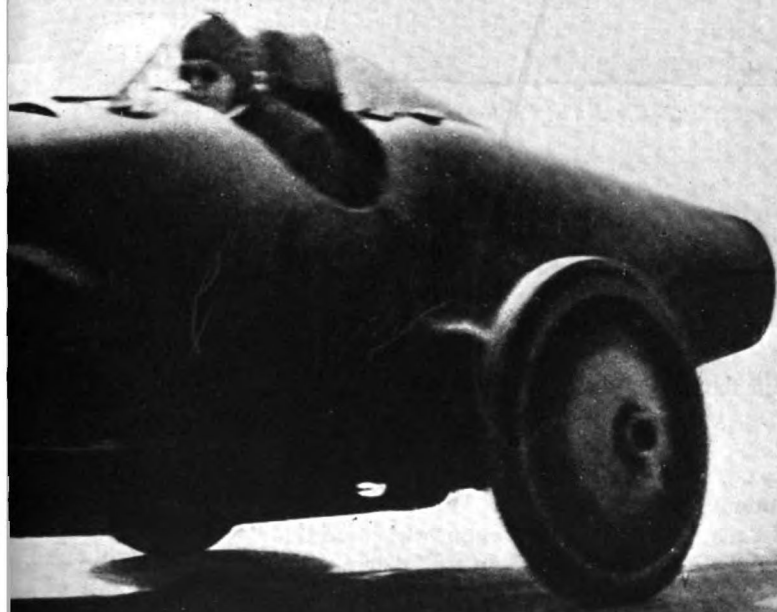
If you can answer the above questions in the right way, you will bring out a hundred per cent. of your ability instead of the fifty per cent. that the majority of young men are content to develop; you will attain your ambition and be what you long to be.—Success.



Tommy Milton Establishing New World's

Have the utmost confidence in Dixon's Graphite
Mobile Lubricants. They have always provided
perfect lubrication with a wide margin of safety.

Thomas Milton



Duesenberg Special, Daytona Beach, Fla.

Tom Milton and Dixon's

THE center spread of this issue of **GRAPHITE** shows Thomas Milton at Daytona Beach, Florida, in the Duesenberg Special breaking all world's records for speed.

The new records as officially accepted by the American Automobile Association are as follows:

	min.	sec.	Miles per hour
1/2 mile	—	11.57	155.57
1 kilometer	—	14.40	155.34
1 mile	—	23.07	156.04
2 miles	—	46.24	155.70
3 miles	1	12.18	149.62
4 miles	1	36.14	149.78
5 miles	2	00.04	149.95

The Duesenberg Special, designed by Fred S. Duesenberg, is an unusual car in that it has two eight-cylinder motors side by side. Each motor drives one rear wheel without the aid of transmission or differential.

Because of Milton's confidence in Dixon's Lubricants, the Duesenberg Special was thoroughly Dixonized when the new records were made.

Tom Milton Wins Uniontown Race

THE 225-mile Universal Trophy race, held in Uniontown June 19th, was won by Tommy Milton, who averaged 94.9 miles per hour.

Only a few minutes separated the winner and the drivers who finished second and third. Jimmy Murphy crossed the line in 2.26:27.98, while Eddie O'Donell was third.

Needless to say, all of the above winners used Dixon's Lubricants throughout their cars.

Two Alternatives

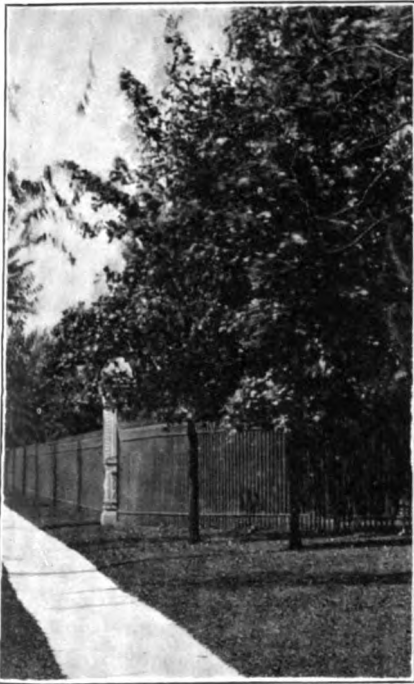
THE end of the war found many manufacturers faced with two alternatives: one was to drop back to the status of 1914; the other was to make use of the increased facilities in the manufacture of new products.

The Winchester Repeating Arms Company had grown from a force of 6,000 men to 12,000 persons, and its plant now covers an area of eighty-one acres. The Winchester Company decided that it was impossible to go back to its former way of doing business, and as the Winchester rifle had been an article of personal use it was decided to make things that are of personal use. The lines selected are these: tools, cutlery, skates, fishing tackle and flashlights.

The Winchester Company has also evolved a method of marketing its products which has caused the biggest stir in the merchandising world that we have seen for many a day.

Other companies are utilizing their war-time facilities and entering the market with new products. Additional branches are being located and even a higher grade of salesmen employed. Selling schemes are being studied and adapted to the needs of a better and larger business. Old-time customers looked after and prospects located.

We are told by well-known and eminently successful "captains of industry" that, above and beyond all, the thing to do to-day is to produce and to utilize all of our facilities and forces, and that no manufacturer with any vision will allow properties to lie idle and unproductive.



Iron Fence, Forest Lawn Cemetery, Buffalo, N. Y.

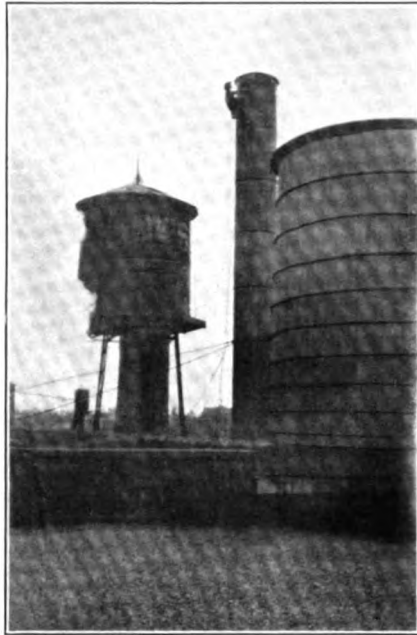
Six Years' Paint Service

WE are indeed pleased to reproduce the following letter received from George E. Troup, Superintendent of the above cemetery:

"Would say that in the summer of 1914 the iron fence of the Forest Lawn Cemetery, lineal measurement of about 2½ miles, was scraped to remove all loose scale from the surface, and given at that time one coat of Dixon's Silica-Graphite Paint. Upon examination lately, I find that there still remains a serviceable film of the material fully covering the structure so treated, which in my opinion speaks very creditably for

Dixon's Paint, and would leave little more to be desired."

Dixon's Silica-Graphite Paint is the most economical paint to use even if its price "per gallon" were twice the amount that we charge. Those who buy a paint by the "per gallon" price and not the "yearly cost," do not buy in the most economical way.



J. Wiss & Sons Company, Newark, N. J.

WE illustrate above tanks, smokestack, and blower system owned by J. Wiss & Sons Company, cutlery manufacturers.

These structures have recently been painted by Steeplejack R. J. Chamberlin, of Newark, with Dixon's Silica-Graphite Paint.

"The Guide Post"



WHEN the idea presented itself that "The Guide Post" should lay off during the hot months, like the more fortunate of sweltering humanity in this humid clime, this seemed, for a moment, to be just the right thing to do. But a little reflection made it clear that a real Guide Post is on the job in all weathers—when it is hot, when it is cold, when it is wet, when it is dry.

It is now the time to look for hot, dry spells when the temper is sorely tried by trifles. During such weather—especially when, as the old lady said, "the humid is very great,"—the clerk or salesman or executive begins to look askance at his copying pencil. This is the time that tries the indelible lead. If it has been made with great care out of the choicest materials all will be well—the copies will stand out clearly, whether manifold carbon copies or copies made by the "wet" (duplicator) process, and the leads will not crumple.

This brings us right up to DIXON DUPLIGRAPH Indelibles.

To make it an easy matter to tell the leads, the DIXON DUPLIGRAPH Indelibles are finished in three distinctive colors:

No. 2070, hard lead, yellow finish.

No. 2071, medium lead, lavender finish.

No. 2073, intense copying lead, purple finish.

No. 2073, the most recent addition to our Indelible Family, the Trade look on as little short of a marvel. Anyone who reads this and who is looking for a pencil for "wet" process copying need look no further. 2073 is the right number.

Many insist on a point protector or a mouthpiece on the indelible. Both 2070 and 2071 are made with these attachments.

The point which "The Guide Post" is making is that the Dupli-graph Indelibles are to be depended on for effective results whether you are making dry (carbon) copies or "wet" (duplicator) impressions, and that the weather will not affect their effectiveness.

A Creed for Americans

I BELIEVE in the United States of America.

My opportunity and hope depends upon its future.

I believe that its stability and progress rest upon the thrift and industry of its people; therefore:

I will work hard and live simply.

I will spend less than I earn.

I will use my earnings with care.

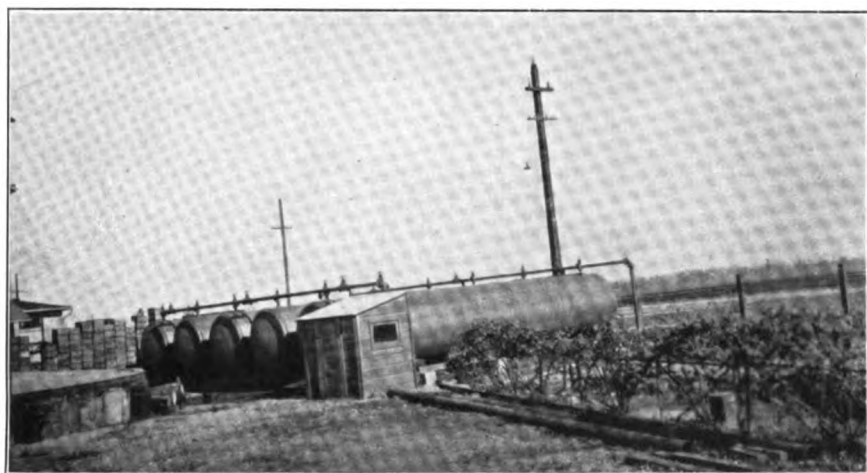
I will save consistently.

I will invest thoughtfully.

I will buy government securities to increase the financial strength of my country and myself.

I will hold above barter the obligations my country thus incurs.

—*Hardware World.*



Municipal Gas Plant, Santa Clara, Calif.

THE auxiliary gas-holders illustrated above and the iron piping underground, and other surfaces in need of protection, were all painted several years ago with Dixon's Silica-Graphite Paint.

Notwithstanding the fact that the conditions are severe, Dixon's Paint, upon a recent examination, was found to be in fine condition.

Twenty Years a Paint User

W. M. STUART of Washington, Va., in placing an order with the Dixon Company for Dixon's Silica-Graphite Paint says, "I have used your silica-graphite paint for the past twenty years and find that it is the best roofing paint on the market."

We have other references on file of a similar character which we shall be glad to furnish to those interested.

Real Worth

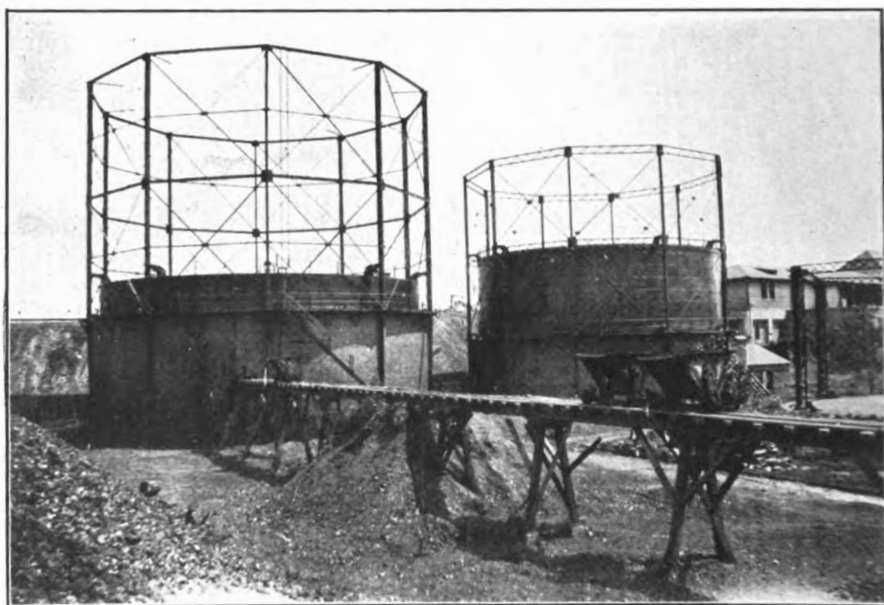
IT is not what you *pay*, but what you *get*, that makes economy and guarantees satisfaction.

When you use Dixon's Silica-Graphite Paint, you get service for your money, which pleases and pays.

You pay the full price for a good bond or share of stock, based on the steady, guaranteed interest. A cheap stock, bolstered by a fictitious interest payment for one or two years, is a trap, and not a good investment.

A flashy ring sold as gold for \$2.00 is a fraud on its price. If you buy a Tiffany gold ring and pay \$30.00, it will give you \$30.00 worth of wear and satisfaction.

Some paints cost less per gallon than Dixon's, but Dixon's gives "Tiffany Service," to use our illustration above.



Municipal Gas Works, Danville, Va.

THE above illustration shows tanks owned by the Municipal Gas Works, painted every three years with Dixon's Silica-Graphite Paint.

Mr. J. V. Perry, Municipal Works Superintendent, also uses Dixon's graphite greases on guides and cables of the city's elevators.

Mr. Frank Talbott is general superintendent of the municipal works. Both these gentlemen are favorably known as experts in the municipal and public utility world because of their professional knowledge of costs, economics and service, and their decision in the purchase of supplies is well worth following.

Dixon's Silica-Graphite Paint is unequalled for service on all gas equipment. It looks well on the gas hold-

ers, and it thoroughly protects for the longest possible period of time.

Gas Superintendents! Don't waste labor and material by using a short-lived protective paint. You have a guarantee of **FIRST QUALITY** only and first-class service when you buy and use Dixon's Silica-Graphite Paint.



PEOPLE who wonder why it is so difficult for the Government to enforce certain laws should remember the saying of Confucius: "Improvement must come first to the man, then to the family, then to the local government and lastly to the state." Laws forced on the people, or laws not consented to by all, or the great majority of the people will meet with resistance now, and always, as they have in the past.



Buettner Graphite Cup

THE Buettner Graphite Auto Cup feeds dry Motor Graphite continually in any desired amount into the cylinders of automobile engines, through the intake manifold.

Actual testimonials from various parts of the country verify the manufacturer's claim that when attached and properly regulated it produces better piston ring fit by building up the cylinder walls, stops valve sticking, practically eliminates carbon because surplus oil is kept out of the combustion chamber, keeps spark plugs clean and increases compression. Consequently a quick-firing, smoother-running motor is the result.

Among many others, a test by a Cincinnati truck manufacturer showed a saving of five gallons of gasoline alone a week, which claim they have covered with a testimonial. A saving in oil, varying from 25 to 50 per cent, is also claimed.

The Charles H. Buettner Company, of 1924-26 West Eighth Street, Cincinnati, O., will gladly take the matter up further with any one who might be interested.



Do Your Belts Slip?

A slight slip of a driving belt may not seem important but the total loss of power is considerable.

Slipping occurs either because belts are overloaded or too stiff to cling closely to the pulleys.

Proper adhesion between belt and pulley is assured by the use of

DIXON'S SOLID BELT DRESSING

Better use nothing than a preparation of doubtful character that may rot the fibre or cause the belts to stretch. Belting is too expensive to be ruined carelessly.

Thousands of users have confidence in Dixon's Belt Dressings. Would you like a sample?

*Write for Booklet No. 190-O,
"The Proper Care of Belts."*

JOSEPH DIXON CRUCIBLE CO.

JERSEY CITY

NEW JERSEY



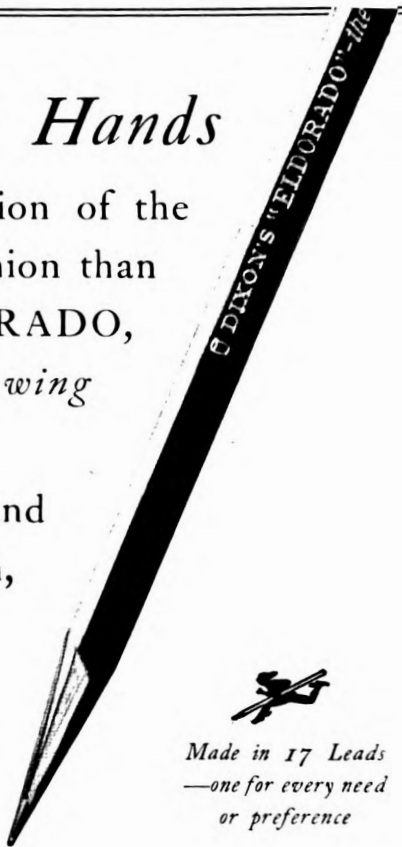
Established 1827



Brains and Hands

No better illustration of the product of their union than DIXON'S ELDORADO, "*the master drawing pencil.*"

On your shelves and in your stock-room, it is a sign of the last word in pencil service.

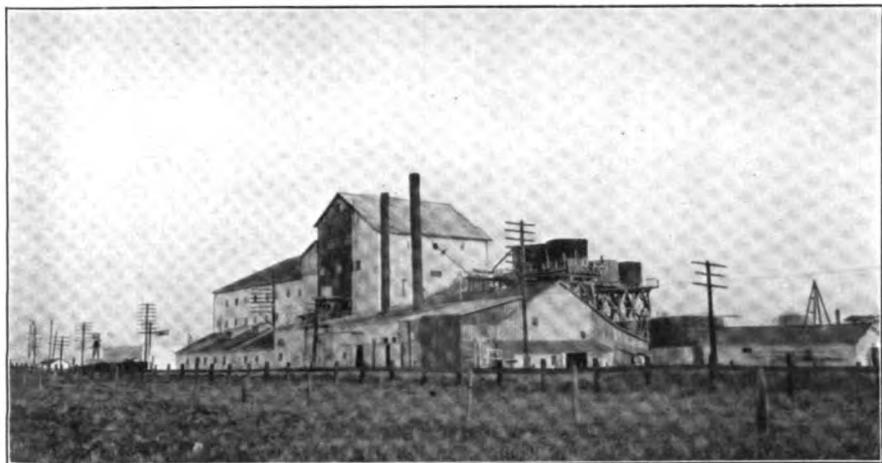


Made in 17 Leads
—one for every need
or preference

**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.

Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto



Smokestacks

Leslie's Salt Refining Co., Leslie, Calif.

THE smokestacks, tanks, and other metal surfaces in need of protection are painted with Dixon's Silica-Graphite Paint.

The owners selected it because of its ability to resist conditions of saline dust, change of temperature, great heat, coal and oil gases.

If you have similar conditions to meet, use Dixon's Silica-Graphite Paint when you are next in the market. It puts off the necessity for repainting longest. Saves in labor. Made in FIRST GRADE—the BEST.

Long Service Paint Record

ALLEGHANY ORE & IRON COMPANY
Iron Gate, Va.

Joseph Dixon Crucible Company:

"This is to advise that we painted our draft stack here with Dixon's Silica-Graphite Paint in 1913 and apparently it is now in fair condition.

Consider this good service and will recommend it for future use.

(Signed) W. H. Cox,
Superintendent."

This testifies to the remarkable service of Dixon's Silica-Graphite Paint, seven years on a draft stack, and still in fair condition.

H. B. Spackman, President, and W. H. Cox, Superintendent, are experts so well known in the mining and foundry business that the authority of their testimony and decision for Dixon's Silica-Graphite Paint is well worth following. These men figure economically and save money.

Dixon's Silica-Graphite Paint gives full worth in service and it cannot be equalled in this respect.



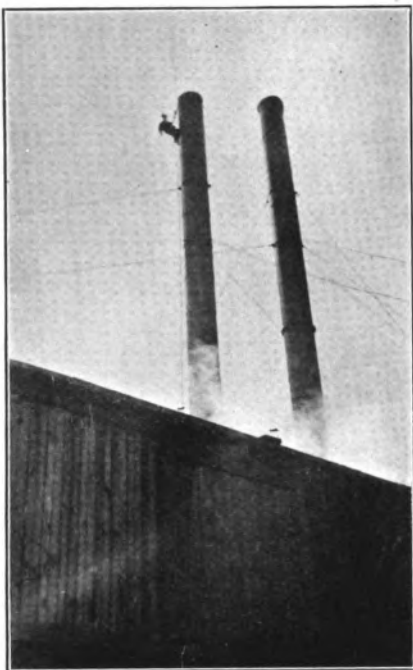
A Flyaway Affair

A FLY and a flea in a flue were imprisoned; so what could they do?

Said the flea, "Let us fly!"

Said the fly, "Let us flee!"

So they flew through a flaw in the flue.—*Orange Peel.*



Smokestacks

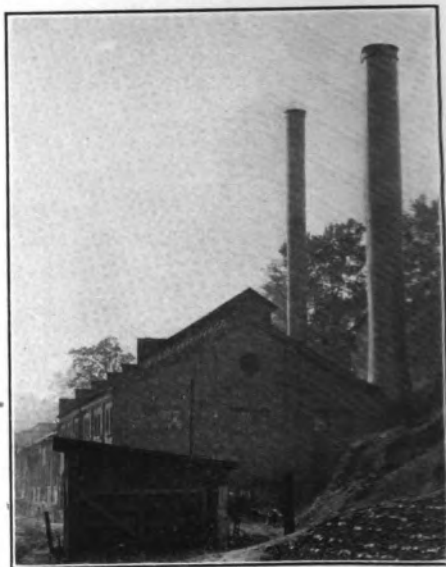
Newark Tube & Metal Co.,
Newark, N. J.

THE smokestacks illustrated above were painted with Dixon's Silica-Graphite Paint by Steeplejack R. J. Chamberlin, of Newark. The stacks are subject to heat, gases, and smoke, as well as sleet in winter.

Wherever severe weather conditions have to be resisted, Dixon's Silica-Graphite Paint is the only paint in the field.

And Still Doing It

A MAN in Abingdon was fined by a magistrate for sleeping and snoring in church. Nothing was done to the clergyman for putting him to sleep.—*Richmond Dispatch*, May 17, 1870.



Power Plant

Lynchburg Traction & Light Co.,
Lynchburg, Va.

FOR years the above company has used Dixon's Silica-Graphite Paint on its smokestacks and other metal work, Mr. L. H. Moore being the contracting painter. Mr. J. W. Hancock is Superintendent, and Mr. Edward Holt, Assistant Superintendent of the traction company.

These gentlemen are experts not only in the traction and light field but in economics. They have figured it out that if Dixon's Silica-Graphite Paint lasts more months and more years, the few cents more per gallon are well spent; in fact, the service Dixon's Paint gives in the traction and public service business makes it a standard protective paint, more economical and more satisfactory than any other, in the opinion and practice of such gentlemen.

Not a Local Matter

WE are told that there is a revolt of the merchants and other business men of New York against the tyranny of organized labor. This revolt has ample provocation, and is of far more than local significance.

The statement has been made in the New York *World*, as a result of inquiry among men engaged in the shipping trade, that "eighty per cent. of the various commerce handled through New York has been diverted to Philadelphia, Baltimore, and Virginia ports, in consequence of the difficulty encountered through the harbor strike, the attitude of the longshoremen and the partial paralysis of the railroads."

The commerce of New York is normally from forty-five to fifty per cent. of the entire foreign commerce of the United States. Therefore between thirty-five and forty per cent. of the whole volume of our national foreign trade has been discommoded and compelled to shift its channels because of labor troubles.

The Merchants Association of the City of New York, of which the Joseph Dixon Crucible Company is a member, is taking action in a most serious and energetic manner with a view of interesting not only its own members, but also all merchants and other business men throughout the country, and we are pleased to say that the evidence shows that the business men of New York are aroused to strenuous action.

As *Harvey's Weekly* puts it, "It would be short-sighted for the people of the nation elsewhere to say that

this is no business of theirs, and that what is New York's loss is simply the gain of other equally deserving ports. That is not true. Some other ports may indeed enjoy an increase of commerce because of New York's loss. But in the end such a disturbance of trade is bound to be detrimental to the whole country. For commerce is not a local matter. A great port is the converging point of railroad lines from all parts of the country. Railroad systems have been developed with the express purpose of serving it. If eighty per cent. of its commerce is transferred to other ports, those roads lose the traffic which they were built to carry, and are left idle, while elsewhere new roads must be built or old ones greatly enlarged to serve the new ports which have sprung up. The whole transportation system of the nation is affected."

These are the considerations which make the New York situation a matter of national concern.

Smother the Fire

AMMONIA generates a heavy vapor that tends to seek the floor. In case of a gasoline fire this vapor settles on the flames, keeping off the air and smothering the fire. A good-sized bottle of ammonia hung from the roof of the private garage by a light but strong string makes no mean fire extinguisher. The principle is that the flames burn the string, letting the bottle fall and break on the cement floor, when the ammonia vapor spreads and tends to smother or at least check the fire.

CAL. FORD OWNER.



Where Speed Is The Big Idea

Racing drivers unanimously put their trust in Dixon's.

They know that Dixon's has never failed in a pinch—that it stands the most tremendous pressure and keeps right on giving the superperfect lubrication they need.

DIXON'S Gear LUBRICANT

No other automobile accessory is so universally used on racing cars. And here's the reason.

Plain grease and oil "squeeze out" under a load. Dixon's does not. Pressure merely forces Dixon's more firmly into the tiny depressions on gear and bearing surfaces. Over all, is formed a smooth, oily polish that puts friction and noise completely out of commission.

Put Dixon's into your transmission and differential—then see the improvement. Neither heat nor cold affect it.

Your dealer has those red cans of Dixon's.

JOSEPH DIXON CRUCIBLE COMPANY
Established 1827 Jersey City, New Jersey

For your transmission and differential Dixon's 677. Also Dixon's Cup Grease and other famous lubricants.

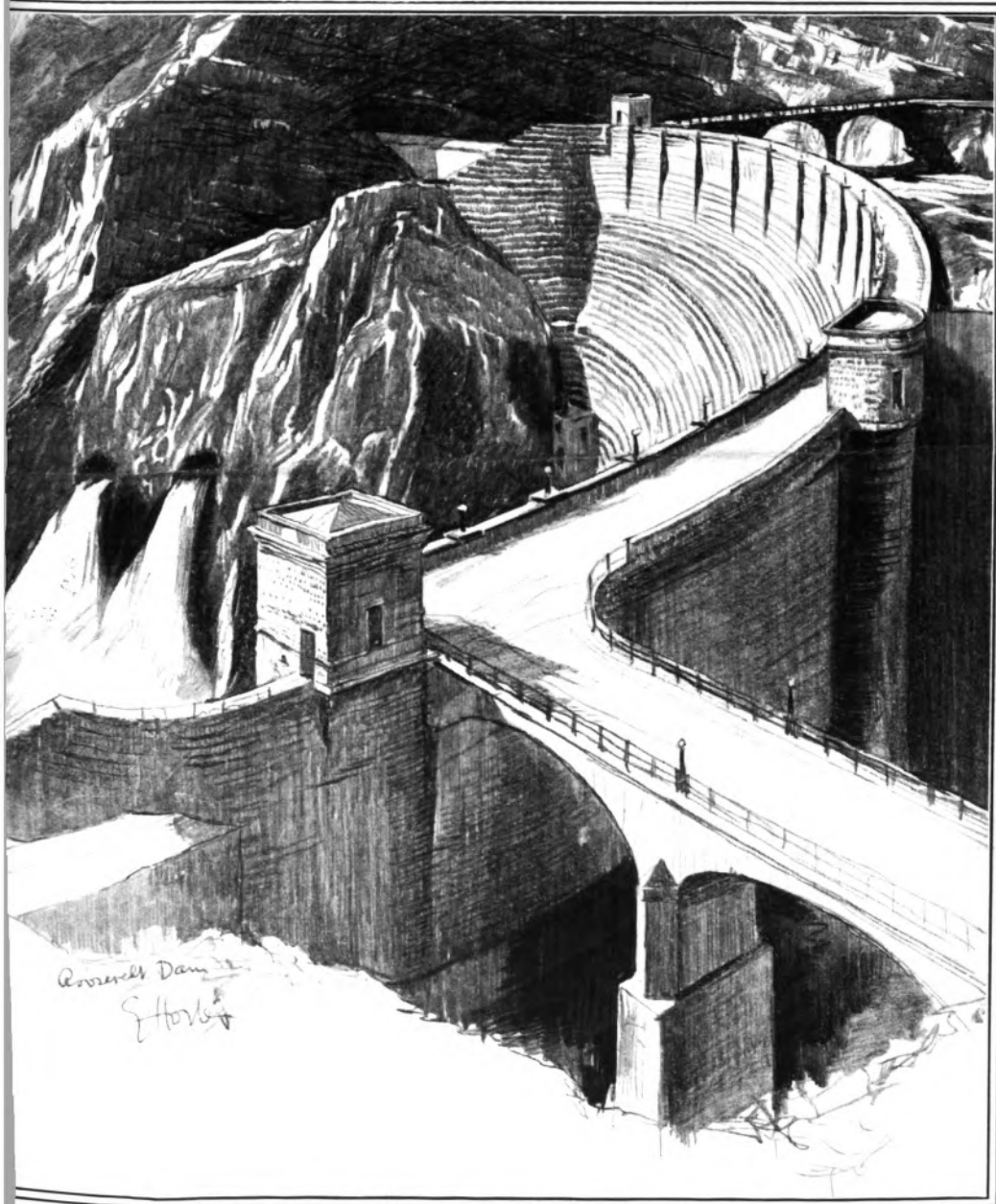


Graphite

VOL. XXI

AUGUST, 1920

No. 8



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



**Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead**



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Export Sales Agents

FOR ALL PRODUCTS EXCEPT PENCILS, CRAYONS AND ERASERS

WALWORTH INTERNATIONAL COMPANY

44 Whitehall St., New York, N. Y.

SALES OFFICES AT

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Calcutta
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Cuba, Porto Rico
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Canada, Newfoundland
Siberia

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Philippine Islands
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China, Japan

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FOR ALL PRODUCTS EXCEPT DIXON'S PENCILS, CRAYONS AND ERASERS
CANADIAN ASBESTOS COMPANY, Montreal, Quebec, Canada

Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

AUGUST, 1920

Number 8

Roosevelt Dam

Salt River, Tonto Basin, *near Phoenix, Ariz.*

THE ROOSEVELT DAM is one of the most impressive irrigation structures in the world and its construction one of the engineering feats of the age. From foundation rock to top of parapet walls, it is 284 feet high, its length on crest is 1080 feet, and its cubical contents 326,000 yards. Its base covers approximately an acre of ground. The first stone was laid on September 20, 1896, and the structure was finally completed on February 5, 1911, and formally dedicated March 18, 1911.

The Roosevelt Dam serves a dual purpose: first, to conserve floods, and, second, to develop power. The storage reservoir created by the dam is one of the largest artificial bodies of water in the world. Spread out a foot deep it would more than cover the State of Delaware.

The engineering problems encountered in building the dam were diverse and complex, and at all times taxed the ingenuity of the builders. Because of its location, sixty miles

from the nearest railroad, in a region heretofore considered as inaccessible, a broad highway to the dam was the first bit of construction undertaken. For forty miles or more the road was literally blasted out of the rock of the canyon walls or the steep sides of mountains. This highway, in fact, is one of the most remarkable in the country, opening to the traveller a region of interesting and varied scenery.

The engineers' troubles were multiplied by this remoteness and because of it the main camp became a hive of manufacturing industries. To obtain power it was necessary to build a dam and many miles of canals. Farms were irrigated and food produced for the camp and livestock. A town was built with stores, schools, churches, etc., to care for the nearly 2000 people engaged on the work.

Earl Horter shows on the front cover how Dixon's ELDORADO "the master drawing pencil" brings out in a pencil drawing the massive beauty of this great engineering feat.

Getting a Driver's License

REAL answers made by ladies to list of questions in examination for automobile driver's license:

Q.—If your engine stalls going up hill what do you do?

A.—Try and start it.

Q.—In letting the car stand, which side should be next to the curbing?

A.—The side that is nearest the sidewalk.

Q.—What should you do if the steerage gear broke?

A.—Go to the nearest garage and have the man fix it.

Q.—Which has the right of way, a car on a main thoroughfare or a car on a bisecting street, when they approach?

A.—The one that gets there first.

Q.—What is the proper precaution to take when backing your car?

A.—Reverse your engine.

Q.—What is the accelerator?

A.—The name of something that has something to do with something inside of the car.

Q.—What is the charging indicator?

A.—Your bill for garage, gas and oil.

Q.—What is the first rule of the road?

A.—Don't run into anything.

Q.—Where should you have your license number?

A.—On your car.

Q.—What is meant by "short circuit"?

A.—Going around the shortest way.

Q.—When the batteries run out, what must you do?

A.—Get them back or get new ones.

—*N. Y. Evening Mail.*

"Manufacturers' Record"

WE have always looked upon the *Manufacturers' Record* as a trade paper, but it has grown far beyond that phase. It is now, indeed, as it claims, an "Exponent of America." In its issue of June 3 we note among other interesting articles:

Ex-Governor Edward C. Stokes of New Jersey, now president of the Mechanics National Bank of Trenton, in an illuminating discussion of bank credits, calls much of our present banking pawnbroking, and this view is endorsed by Mr. Stuyvesant Fish in a letter quoted in an editorial review of Mr. Stokes' paper.

Judge Gary of the Steel Corporation broadly discusses many of the great problems of the hour and points to the road that leads to national safety.

"Welfare Work in the Steel Industry," by Charles L. Close, shows the amazing activity in caring for steel workers and the methods adopted and the many millions expended in this campaign.

"Industry's Need of Oil," by Geo. Otis Smith, for years director of the United States Geological Survey, tells the story of oil and gasoline and their relation to national industry.

Dixon's Wood Grease

FOR gear cases of electric cars. Does not pack or drip, reduces wear and causes gears to run quietly.

It is not suitable for uncased gears.



Residence

Archibald P. Condit, Ozone Park,
Long Island, N. Y.

THE upper part of the above residence is painted with Dixon's Silica-Graphite Paint, and Mr. Condit says, "It is the best-looking house on the block, as well as the most economically protected."

Dixon's Silica-Graphite Paint on the body of wooden buildings lasts sometimes fifteen years, as against the necessity of repainting every few years when other paints are used.

Of course it is necessary to touch up the trimmings every year with a light paint.

Dixon's Silica-Graphite Paint comes in four colors; Olive Green, Natural (dark gray), Black, and Dark Red.

Not only is Dixon's the longest service paint on metal, but on wood-work it gives unequalled endurance.

If owners of wooden homes only realized the possibilities and economy of Dixon's, it would be used far and wide as a protective and ornamental paint for frame houses.



The "H.C.L." is partly caused by the vast waste in painting houses frequently with short-lived paints.

"Dixon's," of Course!

AN Englishman was boasting to an American that there was in the British Museum a book once owned by Cicero. "Oh, that's nothing," retorted the American. "In the Museum in Boston they have the lead pencil that Noah used to check off the animals as they went into the ark."

Dixon's Graphite Grease No. 676

For universal joints, water pump cups, overhead valve grease cups, and clutch release collars. It positively will not melt and run out.



Gas Plant

Pacific Gas & Electric Co., Fresno, Calif.

THE gas generators and tanks illustrated above are protected with Dixon's Silica-Graphite Paint.

In the gas field, Dixon's Paint leads all, because it withstands hardest conditions of paint protection—heat, gases, dampness, abrasion, acids, etc. Save heavy labor charges by using Dixon's once, and being done with your paint needs for a long time.

Dixon's Hub Liner Grease

RETARDS wear of locomotive hub liners, pedestal shoes and wedges, buffer castings plates, etc. A small expenditure for grease pays for itself many times by keeping engines out of the repair shop.

Write for Circular 190-HR.

What Boiler Scale Does

ABOUT 500 persons are killed and 800 injured annually throughout the United States by boiler explosions. Most of these accidents are preventable.

Of 376,822 steam boilers examined by the Hartford Steam Boiler Inspection Co., 184,635 were found defective, 19,219 dangerous and 1,122 uninsurable. The chief defect was a preventable one—scale.

Adhering scale caused 42,877 defective boilers, loose scale or sediment 28,212. Of the former, 1,612, and of the latter, 1,593 were found dangerous. Internal corrosion was the second chief defect, 19,008 boilers being found defective and 793 dangerous. External corrosion caused 10,968 defective and 814 dangerous boilers.

Scale is largely preventable; and so is corrosion. Scale and corrosion are different effects of very similar causes. Greater attention to boiler feed-water means safer, more efficient, longer-lived boilers, lower insurance rates and greater security.

Many engineers have satisfactorily solved the scale and corrosion problem by using Dixon's Pioneer Boiler Graphite. It is safe and reliable—and also effective to a greater degree than ordinary boiler compounds.

Dixon's Engine Front Finish

MAINTAINS locomotive front ends in a neat condition at low cost and with minimum effort. Each application lasts from six to nine weeks.

It is made in liquid form ready to apply, or in paste.



Belcher & Loomis Hdw. Co.

A VERY attractive display of Dixon's Automobile Lubricants was recently staged by the Belcher and Loomis Hardware Co., Providence, R.I., a leading accessory house of old New England. That the exhibit had unusual merit may be inferred by reference to the illustration. The window was dressed by H. C. Crabt.

Considerable skill is required to show a prosaic product like grease without the aid of extra "scenery" such as used by tire companies. But this window proves what can be done with simple equipment and a few cans.

The walls of the window were tinted light gray and the floor was covered with mottled light blue paper, thus furnishing depth to the display. The brilliant red cans in which Dixon's Lubricants are packed were set off to good advantage by draping rich green plush over the stands

and by red plush in the foreground.

Of course, the aluminum-finished gear case furnished the necessary action and was the center of the exhibit. The color scheme and grouping of the objects were so effective, people simply could not pass the window without stopping. Much favorable comment was heard—and what is more important from a business standpoint, many new customers were created for Dixon's Lubricants.

Dixon's Traction Belt Dressing

A PASTE dressing that is famous as a preservative of leather belts. It imparts clinging power to belts, does not readily gather dust and thoroughly waterproofs the leather. An excellent dressing for manila ropes.

◆

"Is your wife's mother enjoying her trip to the mountains?"

"I'm afraid not. She's found something at last that she can't walk over."—*Boston Transcript*.



Water Tank and Tower, Wahoo, Nebraska

Ten Years' Paint Service

THE tank illustrated above is at an elevation of 150 feet and the tower has 100,000 gallons capacity. Painted on the interior and exterior in 1910 with Dixon's Silica-Graphite Paint and again in 1920. When the well known contracting painters D. W. Pyle Company, of Lincoln, Nebraska, and Houston, Texas, undertook the work in 1920, they found that it was only necessary to give one coat of Dixon's Silica-Graphite Paint to the exterior of the tank. Two coats were given the inside.

The D. W. Pyle Company, who have had experience in this line, recommend two coats of Dixon's Silica-Graphite Paint to the interior of potable water tanks. Dixon's Paint is pure and does not injure the

water, and it wonderfully protects the tank.

The Pyle Company are well known in the West and can give expert information to superintendents of water companies or others interested in protective paint and painting.

New Uses for Corn Cobs

THE Department of Agriculture has discovered that corn cobs have other uses than as pipe bowls and kindling. Experimentation has brought forth a half dozen by-products of more or less value, according to Secretary Meredith. One is an adhesive of exceptionally high quality; another is cellulose, suitable for use in the manufacture of dynamite, among other things; still another, as a filler for paper. Acetate of lime is procured from a part of the cob, while a most valuable by-product is furfural, a basic intermediary in dyes. Furfural is useful in the manufacture of paints and lacquers, and in the making of bakelite. It is an insecticide of such efficacy that despite its cost of twenty dollars a pound it has been used to a considerable extent for that purpose. Every ton of corn cobs will yield about thirty pounds of furfural as by-product, at a cost, it is estimated by Department experts, of less than twenty cents a pound.

Dixon's Ticonderoga Flake Graphite

OF great value as a lubricant for cylinders, valves and bearings, either alone or mixed with oils and greases. Indispensable for coating gaskets and packing.

A Unique Club

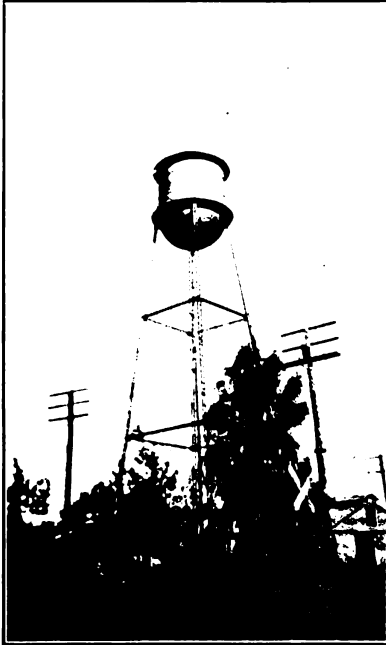
ACCORDING to the *Kansas City Times* there is a very unique club located in that city known as the "Wisdom Club," composed of men from many walks of life and conversant in a thousand different subjects. Mr. Edmond A. St. John, the well-known traveling representative of the Joseph Dixon Crucible Company, is chairman, and we who know him are quite certain that he frequently vacates the chair in order to take part in the discussions, unless it is one of the privileges of the Chair to talk as well as rule.

We quote from the *Times*:

"The 'Wisdom Club' first came to attention in 1912, when a story detailing the club's sessions was published in the *Star*. At that time the club had been in existence twenty-four years, and the subjects that were discussed and settled—always peaceably—were on anything or everything—politics, religion, the drama, art, literature, etc. About fifteen or twenty men composed the club. Every night for more than a quarter century all or some of the members met in their own particular corner of the lobby of the hotel and held their sessions.

"Some of those who were members are: E. A. St. John, who acted as chairman; W. B. Glass, conductor for the Missouri Pacific Railroad, president of the club by common consent among its members; Byron Tyler, a breakfast food manufacturer; H. H. McNeal, a grain buyer; Charles Haire, manager of Emery,

Bird, Thayer Dry Goods Company; Oliver Case, retired contractor; F. H. Austin, real estate dealer, and John Northcott, a house builder. F. K. Robbins, a banker at Wellington, Kan.



Water Tank, City of Reedley, Calif.

Seven Years' Paint Service

THIS water tank was painted in 1913 with Dixon's Silica-Graphite Paint and is still in good condition.

California cannot be beat for climate, fruit, views, and people (their friendliness, etc., etc.), and Dixon's Silica-Graphite Paint cannot be beat for economical service!

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII AUGUST, 1920 No. 8

Work

"**W**HATSOEVER thy hands find to do, do it with all thy might," is the divine command to all. God's call to all men is to work. The slothful man can find no word of commendation or even of palliation of his sin of idleness in all God's book and in all His teachings to mankind.

"Work out your salvation" is an admonition as applicable in individual life and in material things as in spiritual.

It fits a nation's case as fully as it does an individual's. The diligent man shall stand erect in body and soul before kings and the great ones of earth, while the slothful man, the slacker, and the shirker of work shall be poor, and deservedly so.

God never blesses the idleness of the idler. It would be contrary to His nature to do so.

The man who does not work whole-heartedly, who does not work from a sense of duty to the world as well as to his individual family, is making of himself a drudge. He cannot know the joy of living until he throws his very life into his work. An old sawmaker, in telling with

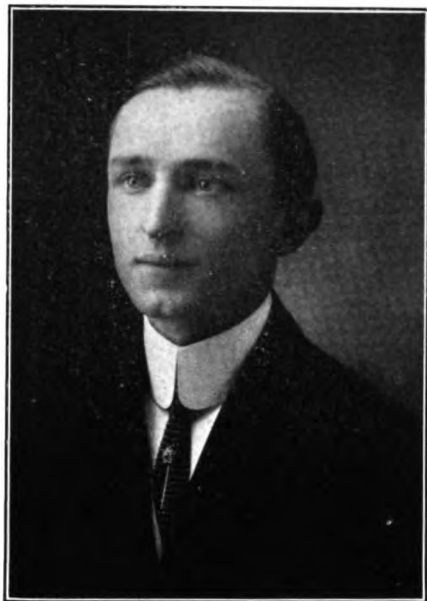
great joy of a prize-winning saw which he had made, described the method of pressing his body against the material that made possible the fashioning of the saw, and said: "I pressed against it until I could feel my very life going into it." That is the spirit with which every man, rich or poor, must work, and without that spirit no man can do his best and stand approved of his own conscience, of his fellow-man, and of the Great Judge before whom we shall all eventually stand and be "judged every man according to his works."

—*Manufacturers' Record.*

Lowering Your Standards

DO you know that familiarity with inferiority will tend to make you inferior? It will lower your standards without your realizing it, and deterioration will soon result. We vibrate to our associations; we tend to harmonize with our environment, with the people with whom we associate. If we mingle with inferiority, familiarize ourselves with it, before we realize it we are vibrating to inferiority; our standards are deteriorating, our ideals dropping.

It is a curious fact that men, as a rule, are incapable of detecting and appreciating their falling standards unless they are very marked or pronounced. There is nothing so insidious in our experience as deterioration. The moment we begin to let up in our aspirations, in our persistent, determined effort to keep up to the mark in every possible way, to keep our ambition from sagging, our ideals from becoming dim, deterioration sets in.—*Success.*

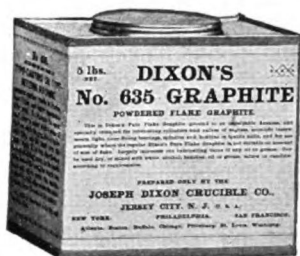


1887—Fred L. Hillmeyer—1920

IT is with deep regret that we announce the death of our late credit manager, Fred L. Hillmeyer, on Thursday evening, July 1, 1920, following an illness of several weeks.

Mr. Hillmeyer was in his 33d year and is survived by his widow. He had been connected with the Dixon Company for nearly eleven years, having come with the Company October 23, 1909. For the past two years he had been Credit Manager and prior to that he held the position of Paymaster and various other positions in the General Office.

During the period of his connection with the Company, he had thoroughly established himself as an able executive. Among his friends he was highly respected.



Dixon's Graphite No. 635

THIS is a special grade of Dixon's Flake Graphite, selected with great care and ground to an impalpable degree of fineness. Its rich, unctuous quality makes it a superior natural lubricant.

Dixon's No. 635 is used on locomotive air pumps to improve lubrication, typesetting machinery, light, close-fitting bearings, spindles, bobbins and other delicate parts of textile machinery, stationary gas engine cylinders, cyclometers, scientific instruments, firearms, talking machines, etc.

For electrical work such as the manufacture of flashlight batteries and motor brushes, where a high degree of conductivity is sought, we can recommend No. 635 as being without equal.

For certain purposes it is thoroughly ground with just enough sperm oil to make it more adhesive. If this style is wanted simply specify No. 635 "oiled" in the order.

Dixon's Graphite Brushes

For dynamos and motors. Prevent wear of the segments, save regrinding of the commutator, stop sparking and pitting. Give most satisfactory service.

DIXON'S GRAPHITE

FOR POWER

Serviceable

Because made of the best and most suitable materials obtainable, compounded after a fashion determined by many years' experience.

Ticonderoga Flake Graphite
Graphite Cup Greases
Graphite Waterproof Grease
Pioneer Boiler Graphite

Write for Bo

JOSEPH DIXON C
JERSEY CITY



Estab

E PRODUCTIONS

ANT WORK

Economical

Because their dollar-year value is as great as painstaking and experienced manufacture can produce.

Solid Belt Dressing
Graphite Joint Compound
Graphite Brushes
Silica-Graphite Paint

2. 190-KP

CIBLE COMPANY

NEW JERSEY





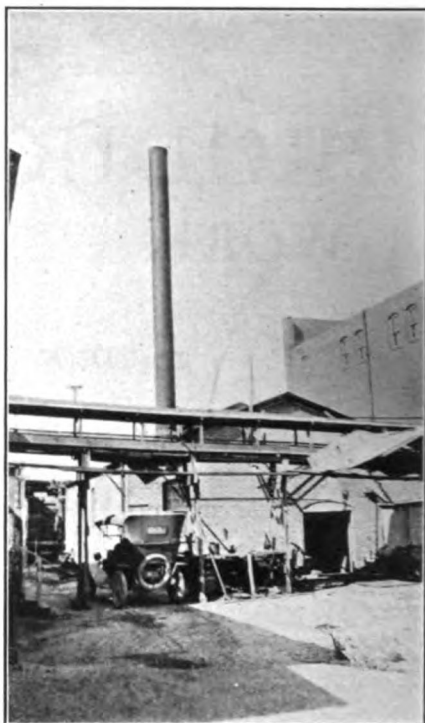
Mr. Henry W. Armstrong

WE wish to announce the appointment of Mr. Henry W. Armstrong as Credit Manager, succeeding the late Fred L. Hillmeyer, notice of whose death will be found in this issue.

Mr. Armstrong has been with the Dixon Company for nearly seventeen years, entering our employ September 14, 1903. For the past few years he was connected with the Crucible Sales Department.

During this country's participation in the World War Mr. Armstrong was Regimental Sergeant-Major of the 312th Infantry and saw active service in France.

In his new position, Mr. Armstrong carries the best wishes of us all.



J. B. Inderrieden Company Fresno, Calif.

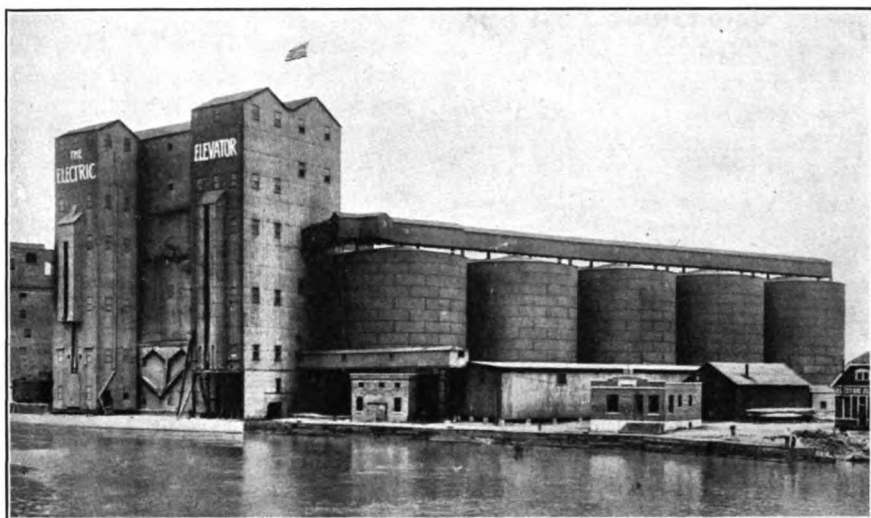
THE smokestack, boiler fronts, and other metal-work painted with Dixon's Silica-Graphite Paint. Fresno is a world-leader for raising dried fruits, etc., and Dixon's Silica-Graphite Paint is a world-leader in the protective paint field.

When used in the boiler or engine room or elsewhere, Dixon's Silica-Graphite Paint has no equal in endurance.

"You need more exercise, my man."

"Exercise, doctor? I'm a piano lifter."

"Eh! Well, hereafter lift two at a time."—*Boston Transcript*.



Grain Elevator

Electric Grain & Elevator Co.,
Buffalo, N. Y.

DIXON'S Silica-Graphite Paint was applied to this large grain elevator in 1916, and it has not needed repainting to date, a service of over 5 years. Dixon's Paint is favorably known and widely used in the elevator business. It lasts longer and is guaranteed **FIRST QUALITY** only.

The foods of the world are still going up, and elevators are, too! But Dixon's Silica-Graphite Paint is going down, because it costs least per year of service. Use it on metal and wood surfaces that need protection.

Dixon's Graphite Cup Greases

DUE to the flake graphite in these greases, they give longer and better service than is possible with ordinary greases.

ELBERT HUBBARD, in one of the early editions of *The Philistine*, said, "Anybody can write poetry, but it takes a genius to circulate it."

An appreciative friend, who herself now and then drops into verse, calls our attention to this and says that there is, after all, only this difference between what Elbert Hubbard says about poetry and a Dixon Pencil,—that it takes a genius to make a Dixon Pencil, but anyone can circulate it.

While this is hardly fair to our Pencil Sales Department, still our order books would unquestionably give credence to this statement.

Dixon's Pioneer Boiler Graphite

Most simple and effective scale remover known. Makes boiler cleaning easy. Does not act chemically, cause foaming, affect quality of steam or injure metal.

Write for special booklet No. 190-T dealing in detail with this subject.

"The Guide Post"

THE Silly Season is in full swing, and all the more need of a dependable Guide Post.

Until we actually got to work on the idea, we always regarded a Guide Post as—well, as just a Guide Post, a wooden upright with a signboard on it. But that *must* be—that *is* a wholly inadequate size-up of the thing.

Remembering the season, we shall venture on a few *Don'ts*.

"Pencil Don'ts to Consumers"

Don't put the point of a pencil in your mouth or nose or ears. It really *isn't* done.

Don't twist or bend it or hammer on the desk; no self-respecting lead will stand such treatment.

Don't expose too much of the lead in sharpening a pencil; three-eighths of an inch is enough of a point for ordinary writing.

Don't bite the end of the eraser-tip of your pencil. It may come out or break off, if you do. It certainly will do better erasure if kept absolutely dry.

Don't forget the name of your pencil, and the trade and grade number. To order, or think you are ordering, a 2B and get a 2H,—that is sure to result in disappointment.



Don't think the lead in a pencil is poisonous. It isn't. The word "lead" is a misnomer. There isn't any lead about it. Don't be misled by misinformation on this point.

Don't let your pencil sharpener get dull.

Don't keep your stock of rubber-tipped pencils in a damp place.

Don't try to put a "needle point" on the "lead" in a very soft pencil or crayon pencil.

Don't let your stock of pencils get too low; if you do, don't be surprised at what you find out.

Dixon's Graphite Brushes

WHERE adapted to the conditions of service, Dixon's Graphite Brushes give better satisfaction than is possible with any other brush.

One of their chief advantages is due to their lubricating properties, which prevent wear on the commutator. Commutators on which Dixon's Graphite Brushes are used, often run for years without being turned down, and remain smooth and true.

Also because of their lubricating properties, Dixon's Graphite Brushes prevent friction losses on the commutator and keep it automatically lubricated, rendering unnecessary the use of any applied lubrication.

When ordering, send sample or sketch, to avoid errors. Also state number of brushes on machine, the number of amperes at heaviest load and the dimensions of the brush.

They are made to fit any type of brush holder. If desired they may be copper-plated and equipped with pigtails.



Dixon's Graphite Waterproof Grease

IN all respects a high-grade lubricant for loose open bearings, gears, slides, etc. It possesses great adhesiveness and tenacity, and will not be thrown from gears, chains, wire ropes, sprocket chains and the like, traveling at a high speed.

Dixon's Waterproof Graphite Grease contains no soluble ingredients and cannot be washed off by fresh or salt water, by acid or alkaline water.

These properties highly commend its use upon:

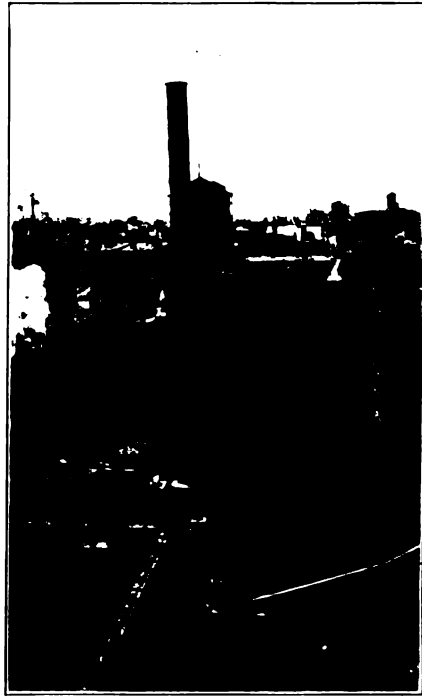
Wire ropes	Winches
Chains	Hoisting engines
Exposed gears	Quarrying machinery
Cranes	Mining machinery
Derricks	Elevator plungers
Dredges	Elevator guides
Steam shovels	Fire hydrants
Pile drivers	Cold roll-necks

and every sort of machinery exposed to water or the weather.

Engineers tell us it has no equal for lubricating and protecting the plungers of mine pumps handling dirty and acid-laden water.



By sparing ourselves the daily task we dig the grave of our higher possibilities.



Valley Forge Cutlery Co.

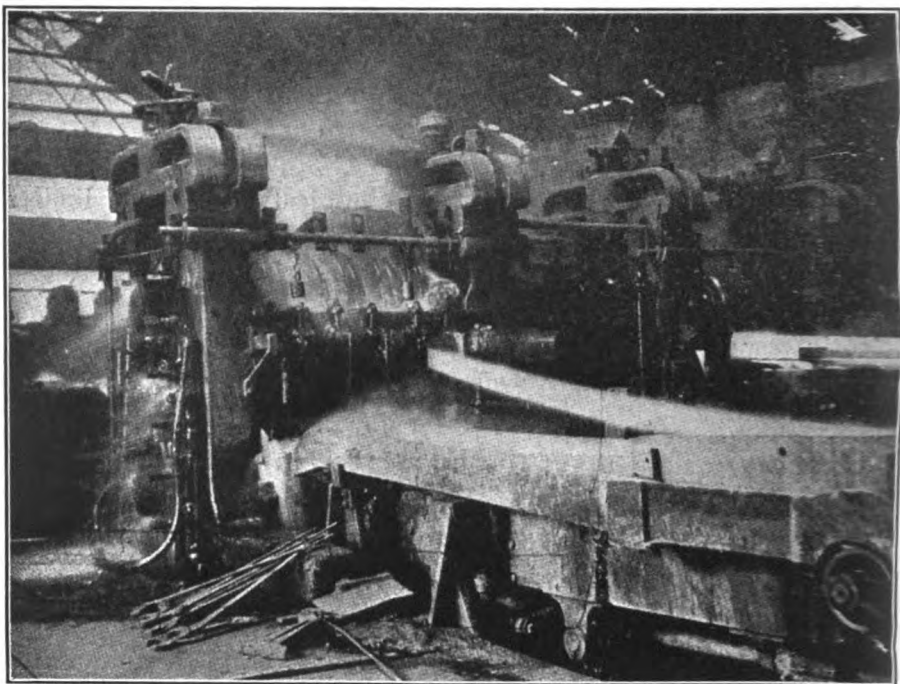
Nine Years' Service

THE tank illustrated above was painted in 1911 by Steeplejack R. J. Chamberlin, of Newark, N. J., with Dixon's Silica-Graphite Paint.

If you are interested in a paint for metal and wood surfaces, write us for details and long service records in your line.

Dixon's Graphite Grease No. 677

A GRAPHITED grease of just the right consistency for all enclosed transmission and differential gears of automobiles and tractors, except those intended to be lubricated with light oil. It is the grease the "Speed Kings" use.



Rolling Mills

SOME of the largest steel mills in the country are regular users of Dixon's Cold Roll-Neck Grease; in fact, have been buying it exclusively for ten years or more. The same is true of brass and copper rolling mills.

Every mill superintendent is interested in keeping down his operating costs, which includes cost of babbitt, brass, etc. Cheap grease, or even grease of good quality which is not suited for the purpose, does not furnish proper lubrication and consequently bearings must be frequently re-babbitted. The job is expensive, aside from the time lost while the mill is out of commission.

Then, too, unsuitable grease increases the friction load on the en-

gines. We have seen engines almost stopped by ingots on the first pass through the rolls, and have been able to improve this serious condition by means of good graphite grease. The same reduction in friction is obtained at all times when Dixon Grease is used regularly.

Dixon's is economical for the reason that the fine flakes of graphite in it adhere to the necks and form a slippery, durable surface that operates with but little waste of power and is but little influenced by heat. It saves babbitt by preventing "hot boxes," and it eliminates many "shut-downs" for repairs that are necessary when cheap grease is used.

We claim that Dixon's is more

economical than low-priced products or high-priced suet. This is based on the number of pounds of grease used, the price, the amount wasted, quality of lubrication and increased life of rolls. In other words, we claim a lower cost per ton of product rolled.

Conditions vary so widely in different kinds of rolling that no one lubricant will be satisfactory for all plants. Hence there are several grades of Dixon's Roll-Neck Greases, each designed to meet definite requirements.

Stove Polish

THE ladies who read GRAPHITE have no doubt used lots of stove polish, in their desire to have the kitchen range presentable, but we wonder if they know which was the first polish that was actively placed on the market. Well, it happened in 1827, nearly a century ago, and the polish was DIXON'S CARBURET OF IRON. Although it actually contains no iron, it was first called "Carburet of Iron" because of the early supposition that graphite, of which it is composed, was a compound of iron and carbon.

For many years it was the best known polish in the world; then newer products demanded all the time of our sales force and stove polish gradually became neglected.

There are more than a hundred brands of polish now, but none of them give the same complete satisfaction as the "old reliable." Most women prefer a preparation that lasts a week or more on a hot stove, rather

than the liquids and pastes that burn off quickly.

Dixon's "Carburet of Iron" is free from poisonous odors and explosive vapors. It does not burn red, but produces a beautiful lustre that lasts. When a real honest-to-goodness polish is used there is no need to go over a stove every day or so to keep it looking attractive.

"Meet Dixon!"

"THIS is Dixon, very old, tried and true friend. Never failed me. Indeed, he likes calls that strain most friendships. He gets me out of a bad scrape every year or two. Even when I neglect my own protection for many years, he defends me, quiet and true."

"Over fifty years of close contact with property has taught him every curve. Each emergency he meets like a veteran. He finishes as he starts, true to perfect form. Your father, grandfather, and great-grandfather know him—good old Dixon! You trust the old folks, don't you? Then meet him, and he'll stay by you, too! Another thing, no new friend is as good as the old."

Dixon's Silica-Graphite Paint

For protection of metal and wood surfaces. At your dealer's or from the manufacturers, the Joseph Dixon Crucible Company, Jersey City, N. J.

Dixon's Solid Belt Dressing

For leather, rubber or canvas belting. A handy dressing that instantly stops all slipping and cannot clog, harden or otherwise injure the belt.

DIXON'S ELDORADO

"the master drawing pencil"

Though the better half of it is the pencil itself in its unrivalled quality, there is still another and important side to it, —and that is the extent and effectiveness of the advertising campaign supporting, maintaining, extending its sale.



*Made in 17 Leads
—one for every need
or preference*

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto



Stationers' St. Louis Convention

MR. AMEDEE PETING, General Chairman of Convention Committees, has issued a call for the chairmen of all committees to meet on Wednesday, noon, of each week. At the last meeting, June 23, all committees were represented and made reports as to the progress.

"The Program Committee has a program planned, which is complete in every detail, and which will insure delegates and visitors to the convention a very enjoyable and interesting time, and one which they will long remember. This program will be published in the September issue of GRAPHITE.

"The Hotel Committee reports that they now have over two hundred reservations. We urge all those who desire to secure rooms at headquarters in the Statler Hotel, to make the reservation at once. Those desiring reservations will please write Mr. H. R. Dotterer, care of Ault & Wiborg Company, 322 North Third Street, St. Louis, Mo., who is acting as secretary for the Hotel Committee, and who will be pleased to take care of all those requesting reservations.

"St. Louis has 165 hotels, in addition to a large number of first-class rooming and boarding houses and apartments for transient visitors. The capacity of twenty-two of the leading hotels of St. Louis is 15,000 persons. St. Louis is prepared to take care of any emergency in the hotel situation, and any other situation if the necessity demands it.

"The St. Louis Convention, Publicity and Tourist Bureau has signed

agreements made by the managers of hotels and visitors in regard to hotel rates. Delegates and visitors to conventions need not fear a sudden rise in hotel rates. The sterling records of hotel managers are assurances that every courtesy will be afforded to visitors and delegates to the convention.

"The Statler Hotel was selected as the headquarters hotel of the convention because of its excellent location in the heart of the down-town section. It is located at 9th and Washington Avenues.

"Club breakfasts are served in the main dining-room, and for those who desire quick service and a measure of economy an attractive cafeteria is operated in the lattice-room.

"There is always something doing at the Hotel Statler. Each evening from 9:30 there are Supper Dances, and a wide variety of Supper Specialties. There are 650 rooms in the Statler Hotel; and the rates range from \$2.50 to \$7.00 per day for one person, and \$4.50 to \$10.00 per day for two persons. Each room is equipped with a bath and modern conveniences.

"Without a doubt, the Statler Hotel is well equipped for conventions. The main convention hall will seat well over 1,000 people without crowding. Other convention halls will seat from 65 to 800 persons.



THE constant effort to keep the desire alive increases the capacity to realize the vision.

Since 1827

When Joseph Dixon made the first successful "black lead" crucible, Dixon Crucibles have maintained a standard of efficiency and quality that has kept them in the lead. The accumulated knowledge of nearly a century of crucible manufacture is woven into the walls of every Dixon Crucible.

DIXON CRUCIBLES

From graphite mine to finished crucible, the entire process is in the hands of Dixon operatives, many of whom have made the manufacture of Dixon Crucibles their life-work.

Each crucible that bears the name Dixon carries the endorsement of an organization which has been through every stage of crucible evolution.

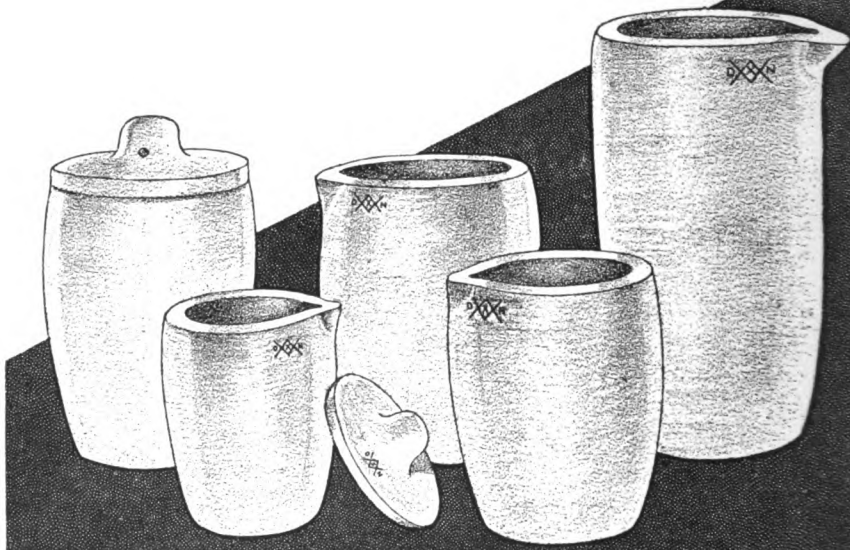
Write for Booklet 190-A.

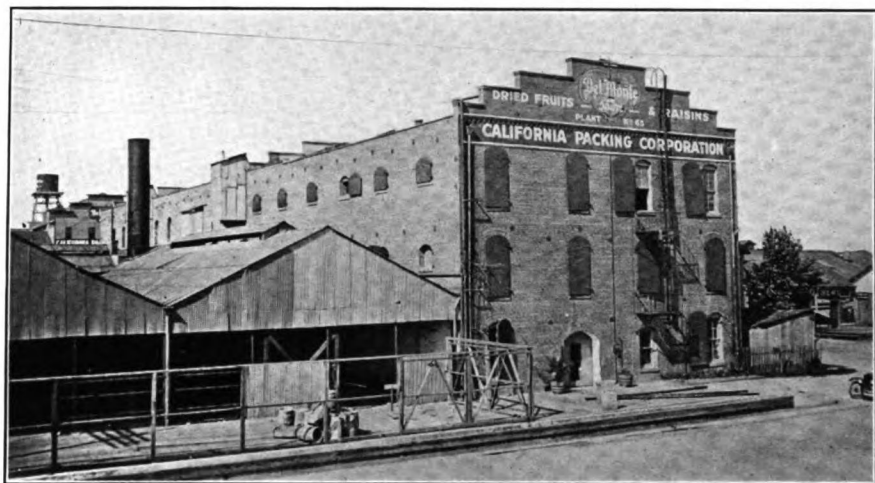


JOSEPH DIXON CRUCIBLE CO.

Jersey City, N. J., U.S.A.

Est. 1827





Smokestack

California Packing Corporation, Fresno, Calif.

THIS firm is famous for its "Del Monte" brand of canned fruits, etc. Dixon's Paint is used to protect the smokestack on their plant No. 65.

TO THE READERS OF GRAPHITE

So that we may keep the mailing list of GRAPHITE up-to-date and as correct as possible, we shall appreciate your advising us of any change in your address at the time such a change is made.

JOSEPH DIXON CRUCIBLE CO.

Advertising Department

JERSEY CITY, N. J.



Paint Economy

is not the price per gallon paid but the number of years of service a paint will give.

It is also painting before corrosion has started its insidious work with a paint such as

DIXON'S Silica-Graphite PAINT

Because of its better protective qualities, it makes frequent repainting unnecessary and so gives better protection at less cost.

It is a natural combination of flake silica-graphite, mined only by ourselves. The vehicle is the best linseed oil obtainable.

Dixon's Silica-Graphite Paint will not peel or crack or flake off because of the natural elasticity of the flake graphite, while the silica is an anchor that withstands wear.

It is made in **FIRST QUALITY** only with a reputation for economy covering a period of 50 years.

Write for Booklet No. 190-B and long service records.

JOSEPH DIXON CRUCIBLE CO.
JERSEY CITY, N. J.

Established 1827

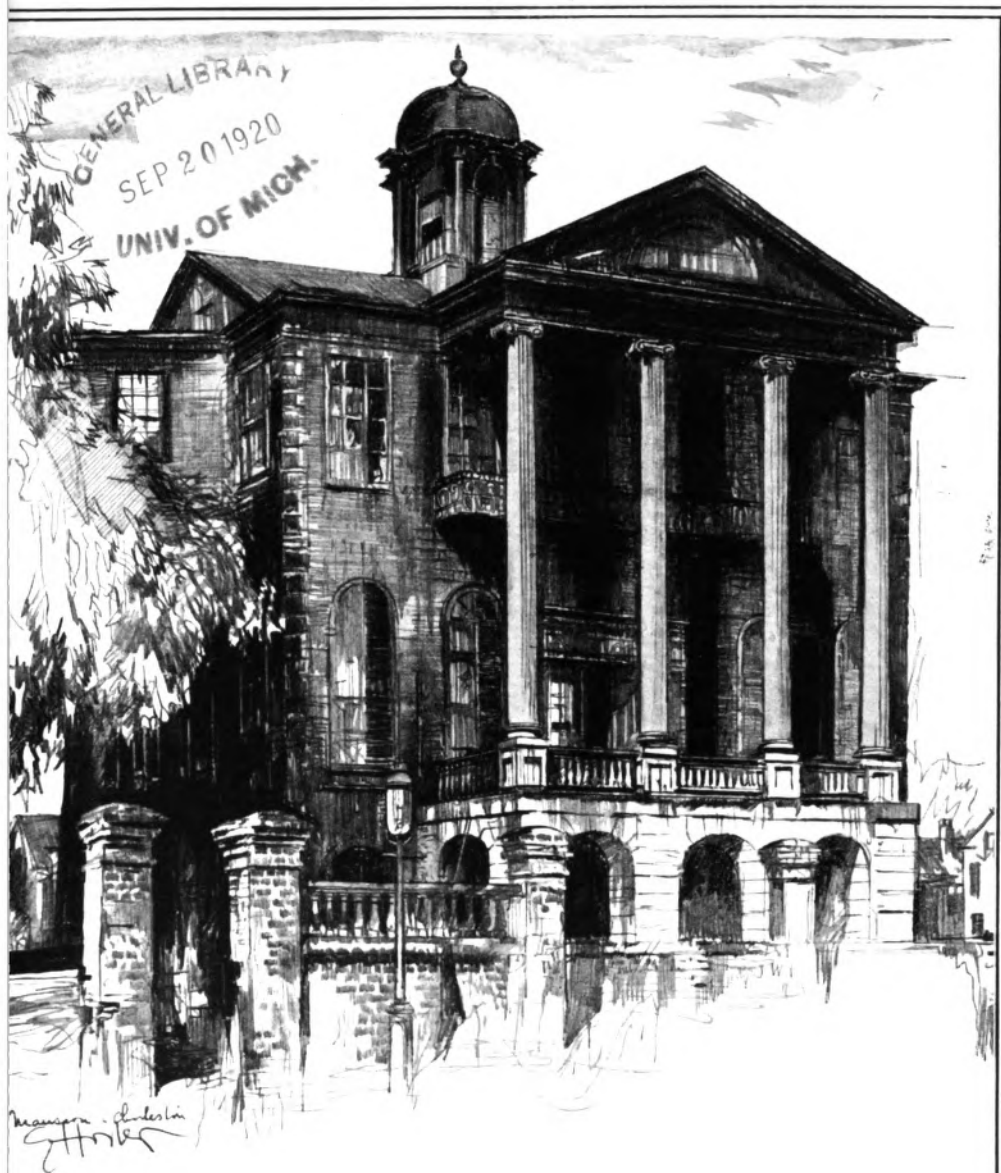


Graphite

VOL. XXII

SEPTEMBER, 1920

No. 9



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead



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Montreal, Quebec

Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

SEPTEMBER, 1920

Number 9

Waste Not—Want Not

THE greatest obstacle in the path to advancement and success of the average worker today is waste; and the most valuable quantity wasted is time.

Everybody is aware that for the wage earner the element of time is divided into three divisions—work, recreation, rest. But only a few are alive to the realization that from each of these divisions flows a little stream made up of wasted moments. And these little streams, flowing on through life, merge into one swiftly moving current of lost golden hours—hours that can never be reclaimed.

The place to dam this River of Wasted Hours is at the source. You cannot hope to check its onward rush at the middle, much less at its end, where it broadens out into a whirlpool that gently sucks you into a vortex of mediocrity.

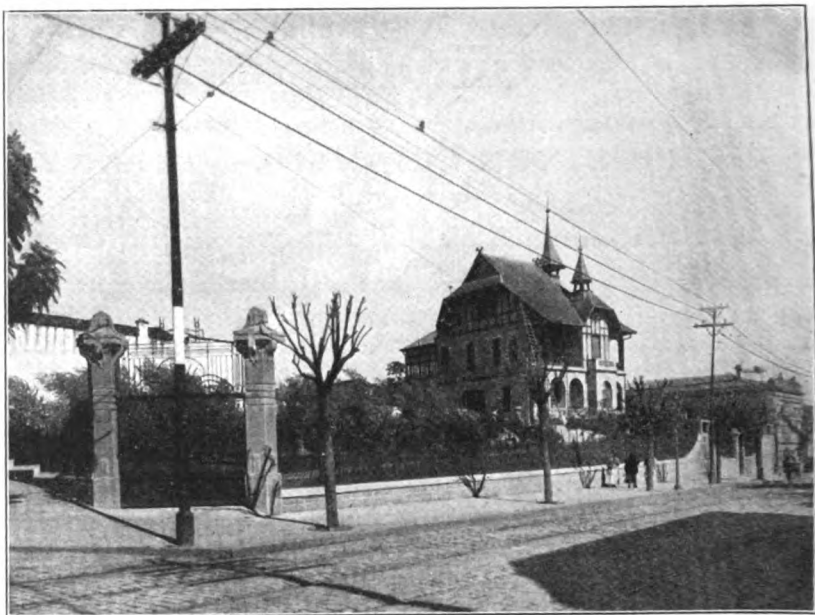
If you are a waster, you must cut out the waste. When at work give of the best that is in you. Continually strive, setting up goal after goal. The ladder is high and the rungs are many—and slippery. If you are giving only six hours of effort—and that half-hearted—out of the eight you are being paid for, you are wasting two hours of constructive endeavor every working day. How can you hope for advancement?

When at leisure make the most of it. If your work keeps you away from the sunshine and the fresh air the greater part of the day, all the more reason why your spare time should be spent out in the open as much as possible. And if out of your leisure you cannot find time for at least one hour of upbuilding study a day, thus fitting yourself for a more responsible position, how can you hope to succeed?

The harder a man works, the more he should value his hours of rest. Hours that are spent in dissipation, instead of laying up a store of energy for the morrow's tasks, are wasted hours. They are hours that leave the workman heavy-eyed, dull, lethargic. How can such a one hope to get on?

Harbor your resources. Be like the athlete who wins a long-distance race.

—*Coal Age.*



Residence, Mr. Affonso Mormano

São Paulo, Brazil

WE illustrate above the residence of Mr. Mormano. The wood trimmings of Mr. Mormano's attractive home are painted with Dixon's Silica-Graphite Paint, Dark Red. The ornamental iron fence and gates are protected with Dixon's Natural Color.

Mr. Mormano is president of the firm of Affonso Mormano & Company, Rua das Palmerias 153, Rua Ypiranga 62, São Paulo, manufacturers of iron beds.

The illustration shows the handsome way in which Brazilian gentlemen build and do everything else. They are able to pay for and demand the best goods and they want the best service.

Their wonderful country has an area larger than the United States; and while still a large portion of the country is undeveloped, rapid progress is being made in all lines. The house shown is typical of the better type of private residences in the São Paulo district.

When a Man Knows

WHEN a man has had Dixon's Silica-Graphite Paint applied to his metal or wood work, and year has followed year without further cost for repairs or repainting, he doesn't "think," or "believe," or "feel,"—**HE KNOWS** he made use of the most economical and the best protective paint probably in the world. It was the most economical because it gave the longest service. The biggest item in cost is always the cost of labor.

Preparing Graphite for Foundry Facing

THE Canadian department of mines has issued a comprehensive pamphlet, by Hugh S. Spence, describing the production and uses of graphite. On the subject of foundry facings, Mr. Spence says: "While different materials are used for this purpose, including talc or soapstone, carborundum, and various forms of carbon, such as sea coal, charcoal, coke, gas retort carbon, etc., graphite is the most important of the facing materials for mold surfaces, and large quantities are used in foundry work. Practically the only market for the low-grade dust graphite from the refining mills, which contains between 40 and 60 per cent. carbon, is the foundry facing trade.

The preparation of graphite for facings, apart from the preliminary drying and crushing that may be necessary when the raw material is crude ores, such as Korean, Mexican, etc., and which are not required in the case of mill dust, involves grinding in tube mills, the product from which is air floated.

Inasmuch as graphite possesses no adhesive property, it is necessary to add a proper bonding constituent to it when used as a facing for mold surfaces. The binder absorbs a certain amount of moisture from the mold, and this holds the facing in place; and when the bond is calcined by the molten metal, the facing is rendered somewhat porous, thus allowing the exit of moisture and occluded gases. Proper proportioning of the graphite and binder is important, since, if

there is too much of the latter, peeling becomes difficult, and if too little, the graphite runs before the metal flowing in.

In applying graphite to green sand molds, it is usually dusted on and then slicked off with the tool, or else rubbed on with the hand and the excess blown away. It is also laid on with a fine brush, care being taken not to disturb the sand surface.

For dry sand work, the graphite is applied wet, in the form of a wash, the liquid used being molasses water or some other solution containing vegetable substance possessing adhesive qualities, such as the waste liquor from pulp mills—glutin. The graphite is usually mixed with fire-clay, and a syrupy mixture is obtained which is applied with a swab.

With regard to the grade of graphite best adapted for foundry facings, the best results are obtained by the use of *high grade flake*. This material may be adulterated considerably and yet be better than the poorer varieties of graphite. Soapstone, coke, anthracite, and even bituminous coal are often ground up with graphite in order to cheapen the mixture. The preparation of proper specifications, based upon reliable tests, is one of the urgent problems of the foundry.

In the manufacture of foundry facings, more graphite is utilized than in the making of any other article in common use, with the exception of crucibles."—*Foundry*.



Lubricant for Locomotive Hub Liners

RAILROADS are constantly confronted with a great number of items of expense, seemingly small in themselves, but which total a huge amount. Therefore everything that will help to cut down the cost of any item is given serious consideration and is adopted if the saving effected is worth while.

One of these items that until recently received too little attention is the expense resulting from the wear of locomotive hub liners. Now as the result of suggestions made by the Dixon Company several railroads are lubricating the liners regularly and other companies will follow soon.

Failure properly to lubricate the various parts of locomotives, such as shoes, wedges, hub liners and chafing castings, necessitates withdrawing locomotives from service and sending

them to the shops on account of wear in excess of economical limits.

Driving box lateral is an important subject to-day. Numerous devices have been invented and placed on the market to make it possible to remove driving boxes and reapply lateral liners without dropping the wheels, but this work can be eliminated if proper lubrication is applied in a systematic manner. Ordinarily we may expect 30,000 miles of service before it is necessary to take up lateral, but in some cases where lubrication has been neglected, the adjustment has to be made at the end of approximately 5,000 miles. Not only is the service of the locomotive lost for at least a day, but the operation itself is expensive.

Under the most favorable conditions the cost to renew hub liners on

a single pair of driving wheels, including the cost of having the engine out of service, is at least \$50. Ordinarily the cost is higher than that on account of repairs not being made promptly. Much of this expense can be avoided by applying a few cents' worth of Dixon's Graphite Hub Liner Grease at regular intervals. It is handled with a grease gun without waste.

Dixon's Grease will properly lubricate the parts mentioned above. The elimination of cutting and heating, and the prevention of rapid wear, greatly prolong the time between shopping periods. In fact, records show that engines stay in service several thousand miles longer before coming to the shops to have liners renewed.

Dixon Service Gives Real Enjoyment

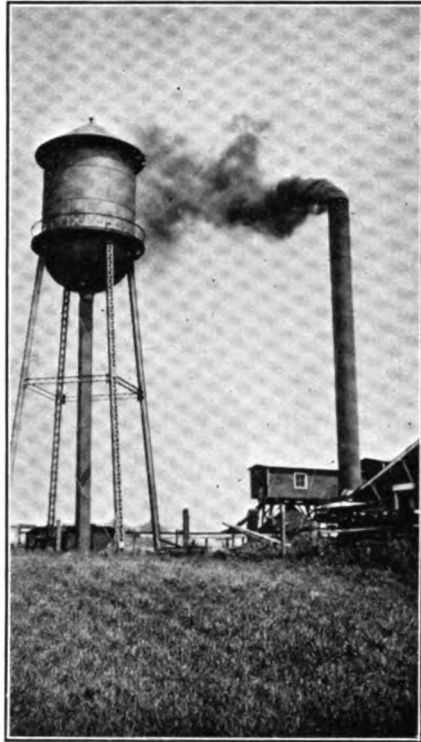
MR. G. W. STRONG, of the Strong Machine Works, Bainbridge, N. Y., in placing order with the Dixon Company for a quantity of Dixon's Silica-Graphite Paint, adds:

"We enjoy having Dixon's Silica-Graphite Paint in stock for the reason that we know we are doing our customers a genuine service in advising them to prevent rust with a paint which has no superior."



WE must treat each man on his worth and merits as a man. We must see that each is given a square deal, because he is entitled to no more and should receive no less.

—Theodore Roosevelt.



Plant, Seminole Condensed Milk Co.,

Holland Patent, N. Y.

WHO does not know the famous Seminole Indian Head brand? This is the plant of the Seminole Condensed Milk Company at Holland Patent, N. Y., the water tower and smokestacks being protected with Dixon's Silica-Graphite Paint.

Who can beat the wisdom and products of the Empire State? Seminole makes unsurpassed products and chooses an unequaled service paint for economic and thorough protection.

Our Booklet No. 190-B, "Painting the Smokestack," is yours for the asking.



"Boardwalk"

A New Dixon Pencil Assortment

THE Trade will welcome this new Dixon Pencil assortment. It is a novelty that will attract. The illustration below shows how brisk and lively and up-to-date the box looks, but it does not even suggest its color and atmosphere. It makes you think of pleasant things just to glance at it.

The pencils which go to make up the assortment are all "tried and true" Dixon Rubber-tipped Pencils, among them such leaders as Dixon's TICONDEROGA No. 1386, ANGLO-SAXON round and hexagon, and CABINET pencils. Many of the pencils are equipped with the patent Dixon WEDGE eraser-tip.

Every inch of space is utilized in the construction of the box, which is as substantial as it is fresh and glowing in appearance.

Accompanying this word of introduction is sent this word of advice: **COME EARLY** with your orders for Dixon's **BOARDWALK Assortment No. 433**—to avoid the rush.

"Victory" Assortment Withdrawn

THE Joseph Dixon Crucible Company announces the withdrawal of **VICTORY** assortment No. 434. Orders now in hand for this box will, of course, be filled in turn as received.



**Ease and Speed with Dixon's
ELDORADO, "the master
drawing pencil"**



Dixon in Brazil

ON the top floor of a splendid office building in São Paulo, Brazil, is situated the representative of the Joseph Dixon Crucible Company in that great nation of South America.

We are showing the above photograph giving a partial view of our Brazilian representative's office.

The picture shows the members of the staff, reading from left to right: Mr. Puccini, Mr. M. V. Powell, representative for Brazil, Mr. Fonseca, Miss Senior, and Mr. Mosser. Mr. Tobler, traveler, is not in the picture.

Dixon's Silica-Graphite Paint and our other Graphite Products (but not including Lead Pencils) are ably looked after by Mr. Powell.

Opinion of Labor President

AT the recent convention of the American Federation of Labor held in Montreal, John Donlin, president of the building trades department, stated in his annual report:

"The wage earner is just as much responsible for the high cost of living as any other agency. If every worker doing physical labor would insist that production equal pre-war times there would soon be a reduction in the price of commodities. The higher wages go, and the more production falls off, the more the worker is going to be hurt."

Dixon's Graphite Oil No. 675

A GRAPHITE gear oil for worm drives and for transmission and differential cases of automobiles and tractors designed for light oil lubrication.

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII SEPTEMBER, 1920 No. 9

Being on Time

THE successful men, no matter what their calling, know the value of time. William Matthews calls them "misers of minutes" and what waste should they guard against more carefully than that of the golden minutes which mean success?

Napoleon won hundreds of battles by being on time or a little before time. Later, when he had grown fatter and less fit, he was defeated because of the promptness and punctuality of Blucher, which enabled Wellington to turn a drawn battle into victory.

In business a man should not only be punctual to the minute with engagements which he makes, but with all implied engagements. He should be at his desk or at his post in the office, store or shop on time, and regularly during business hours, just as a soldier should be on duty at any given hour.

There is no excuse for irregularity and the man who isn't on the job all the time will find himself out of a job in double-quick time.

Watch your business or working minutes. Make each of them pay you a real return.—*Am. Stationer.*

A Superior View of the Temperature

OTHELLO ought to be in New York. He could satisfy his desire to be roasted in sulphur and washed in steep-down gulfs of liquid fire. And he could add to his punishment that ever-climbing percentage of humidity, which the ancients were content to call "mugginess." Meanwhile, high up in air, the New York weather shaman sits in his hanging gardens, spanned by aerial bridges, all of ice, chanting happily "Push Dem Clouds Away," and assures the panting and irritated multitudes in the street that it isn't hot at all.

No thermometer even on the street is ever equal to registering the heat and miscellaneous discomfort of an extreme blazing and muggy day. Many naïve souls roundly curse the mercury, deeming it Laodicean, dishonest, a minimizer. At any rate, the temperature that folks attempt to breathe and work in and the temperature of the serene gods of the weather observatory can't be reconciled. Happy and humorous cloud-girt observer, cool, tranquil, sipping, one loves to think, an interminable "horse's neck." The limp man in the street can't help envying him and ought, perhaps, to forgive him. Still, if the theory of transmigration be true, the next incarnation of these human snowballs of the sky will be as stokers on the Flying Dutchman's ship, now, of course, the dean of tramp steamers; and they will have to work twenty-four hours a day, with no assuaging oatmeal water.

—*N. Y. Times.*

TEN THINGS FOR SALESMEN TO THINK ABOUT

I.

Our customers judge this company by what they think of you.

II.

Old customers are new customers who have been rightly treated.

III.

The recollection of pleasant treatment remains when everything else is forgotten.

IV.

Do not expect a customer to believe what you do not believe yourself.

V.

Courtesy always pays—and you are paid to be courteous.

VI.

Two are required to make Service perfect, the Server and the Served; and you are always responsible for your part.

VII.

Our satisfied customers are our most valuable asset.

VIII.

Let your willingness outrun your obligations.

IX.

We exist not alone for today. We live for tomorrow also.

X.

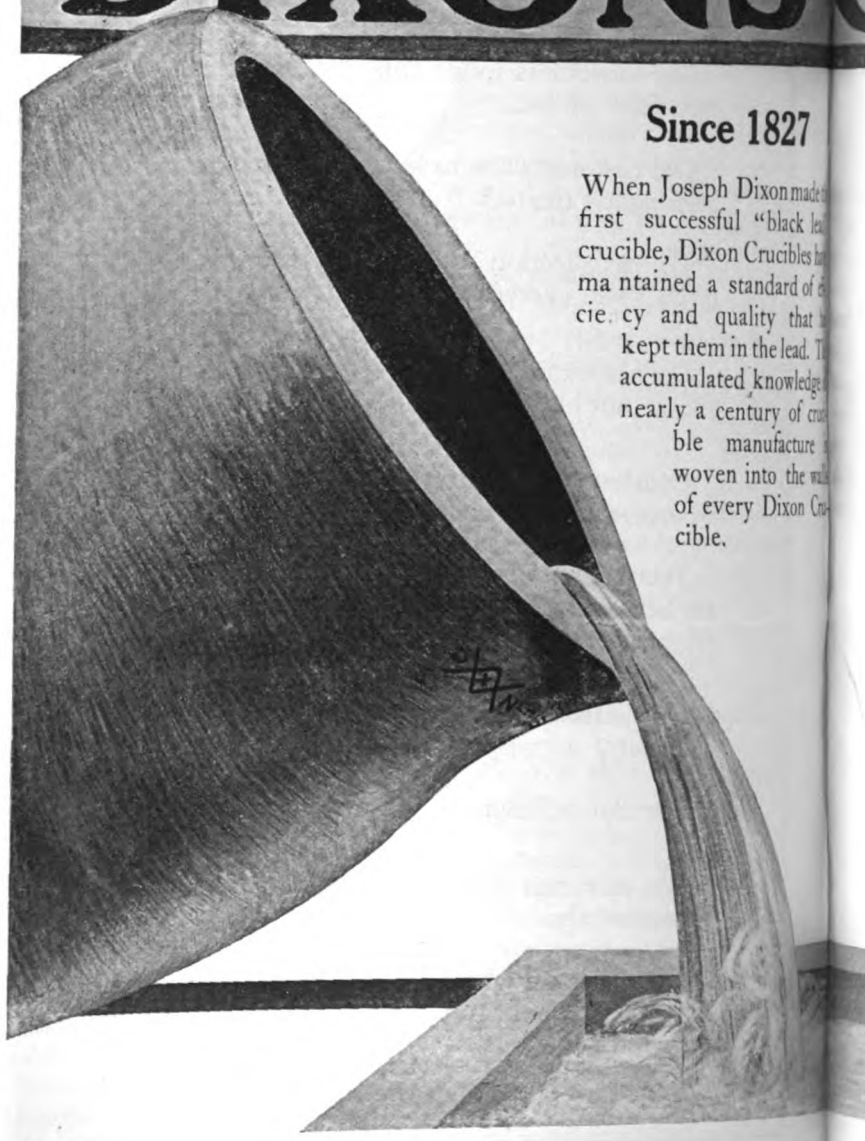
No article on which is the name of your firm is completely sold until the customer returns to buy again.

—Merchandising Advertising.

DIXON'S

Since 1827

When Joseph Dixon made the first successful "black lead" crucible, Dixon Crucibles has maintained a standard of efficiency and quality that has kept them in the lead. The accumulated knowledge of nearly a century of crucible manufacture is woven into the walls of every Dixon Crucible.



CRUCIBLES

For Every Metallurgical Requirement

There is no possible requirement of the assay laboratory or melting department where crucibles and refractory products are used that can be fulfilled more economically and satisfactorily than through the use of Dixon's Graphite Crucibles and Refractory Products.

They are uniform in composition, construction and performance. Each crucible that bears the name DIXON carries the endorsement of an organization which has been through every stage of crucible evolution.

Write for Booklet No. 190-A

Joseph Dixon Crucible Company

Jersey City, New Jersey, U. S. A.

Established 1827



Melting Furnaces

Some Factors to Be Considered in the Selection of Melting Equipment for Non-Ferrous Metals

By Thomas H. A. Eastick

THERE is no "best furnace" or "best process" for the melting of brass and copper alloys any more than there is a best furnace or best process for making steel or glass. The kind of equipment or process to install for brass melting depends entirely on the conditions met with, a few of which may be enumerated:

(a) The metal or alloy, its melting point and casting temperature.

(b) Number of different alloys or mixtures in use and production per day of each. Is contamination of one alloy by another of importance?

(c) What kind of scrap is used; its nature, size and shape, etc.

(d) Sand molds or metal molds.

(e) Production per day and whether melting and casting must wait on preparation of molds or vice-versa. Twenty-four hour, 8 hour or intermittent operation.

(f) Size and weight of castings.

(g) Physical characteristics of the shop and the neighborhood where the work is to be done.

(h) What kind of fuel is in use, in quantity, for other furnaces in the plant. Accessibility to Coal, Gas, Electricity and Oil.

These are only a few of the variables met with and that they do vary may be realized on reflection that there are melting plants for 50 lbs. a day (of gold and precious metals, etc.) and for 500,000 lbs. a day; for casting pet cocks weighing $\frac{1}{2}$ oz. and manganese bronze propellers weighing many tons, in sand, and extrusion billets weighing 500 lbs. and gold bars weighing 5 lbs., in iron molds; casting on the top floor of a six story loft building in a jewelry plant and casting in reinforced concrete building, 600'x100', with a dirt floor; casting in a large plant with railroad siding for oil tank cars, in a plant in the natural gas region at Niagara Falls with electric power for $\frac{1}{2}$ or $\frac{3}{4}$ c K.W.H. and in the coal district

with coal in the back yard. And so we might go on indefinitely enumerating the enormous number of variables met with in melting and casting non-ferrous metals.

One set of conditions met with that are more or less common to all plants in that line, are those presented in the brass sheet, rod, wire and tube mill casting shops. Here we find standardized alloys and molds and uniform production.

The desire to develop a cheaper method of melting than that of the old coal fired pit crucible furnace has grown rapidly in the last few years owing to the greatly increased labor costs and the scarcity of the skilled labor required. This desire has led to the introduction of oil and gas fired stationary pit crucible furnaces, oil and gas fired tilting crucible furnaces and oil and gas fired non-crucible or reverberatory furnaces, and lastly of electric furnaces of various types. The brass mills have unfortunately never shown much interest in oil or gas fired furnaces for reasons which are not apparent. Possibly for the mistaken idea that the "fuel is expensive," overlooking the fact that fuel cost is only a small factor in the cost of a satisfactory product. Another possible reason is the idea that "injurious gases" are absorbed by the metal and cause blow-holes, spills, etc. The products of combustion of oil or gas are no different than of coal. There are no "injurious gases" and there does not appear in all the literature on copper alloys a single authentic proof of bad metal caused by the products of combustion. A typical analysis of the burned gases or products of combustion of fuel oil in a well designed and properly operated furnace, is as follows:

Carbon dioxide.....	12.5%
Oxygen	0
Oil vapor.....	0
Carbon monoxide.....	2.1%
Nitrogen	85.4%

(Bullen's *Heat-Treatment of Steel*.)

Oil and gas fired crucible and reverberatory furnaces have been used to some extent by foundries and sand casting shops with fair results. There are, however, many poorly designed furnaces of this type on the market the performance of which has tended to discourage the trade in their use, and further, even the furnaces of merit are rarely operated properly, this being usually left to untrained labor and the poor results obtained blamed on the furnace.

Within the last two or three years the electric furnace makers have come forward with many designs of furnaces for melting brass. There are three types of these on the market at the present time which may be said to have successfully operated on a commercial scale, namely,

Carbon Resistance Type Furnace.

Rocking Arc Type Furnace.

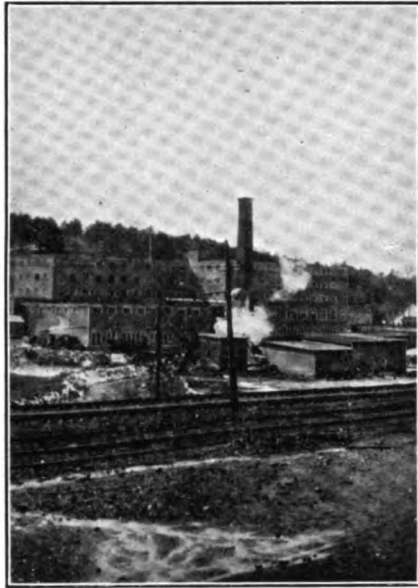
Induction Type Furnace.

In considering equipment for brass melting it is very improper and misleading to speak of "electric furnaces," "oil furnaces," etc., and to compare an "electric furnace" with a "gas furnace" or an "oil furnace" with a "coal furnace." The fuel, that is to say gas, coal, oil, electricity, etc., is the source of heat and it is the application of this heat to the work which is the all-important feature. There are well designed and badly designed electric furnaces just as there are well designed and badly designed gas furnaces, etc., and the principal claims set forth by the electric furnace makers are:

1. No crucibles are required.
2. No coal and ashes to handle.
3. Less zinc loss.
4. Lower labor cost.
5. Better metal than by any other method of melting.

It is unfortunate that these claims have been made without sufficient presentation of authentic facts to back them up, and without, at the same time, pointing out that the economies effected with the electric furnace are also possible with fuel fired furnaces. Let us check over the claims above in comparison with other types of fuel fired furnaces.

(To be continued)



**Plant, Richard Young
Company,
Gloversville, N. Y.**

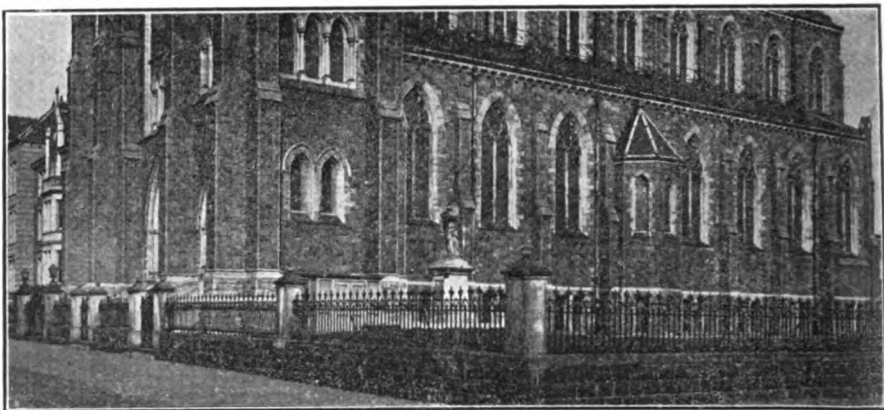
EIGHT YEARS' PAINT SERVICE

THE Richard Young Company's factory, Gloversville, N. Y., was painted eight years ago with one coat of Dixon's Silica-Graphite Paint and is still in good condition. Has one coat of any other protective paint ever given such an economical and long service? Summer, winter, and other conditions prevail here and all were successfully met and withstood.

Write for Booklet 190-B.

Dixon's Triple Valve Graphite

AN impalpably fine dry flake graphite of the highest quality that fully meets the peculiar requirements of air brake triple valve lubrication.



Iron Fence, St. Patrick's Church,

Elizabethport, N. J.

EIGHTEEN YEARS' SERVICE

THE ornamental iron fence around the lawn of this handsome Gothic stone church was painted in 1902, and again in 1920 (eighteen years' service), with Dixon's Silica-Graphite Paint—the contracting painters being the firm of Conway Brothers of Elizabethport, N. J., a most reliable concern.

Eighteen years is a wonderfully long service. The proper protection of iron fences and metalwork near tidewater and in industrial and railroad centers is a matter of considerable difficulty because of conditions of dampness, smoke, acid fumes, cinders, contraction, expansion, and other destructive agents.

Dixon's does not flake off. It becomes, in effect, a part of the surface, leaving no air space for dampness between metal and film. Rust costs more than paint. Paint to-day and be glad to-morrow! That's the way to make worry face the past.

A Word of Warning

MOST grades of graphite are not suitable for lubricating purposes.

The function of graphite is to form over the microscopic roughness of bearing surfaces a wonderfully smooth, durable coating that positively prevents actual metallic contact and wear. Plain grease or oil alone cannot perform this service.

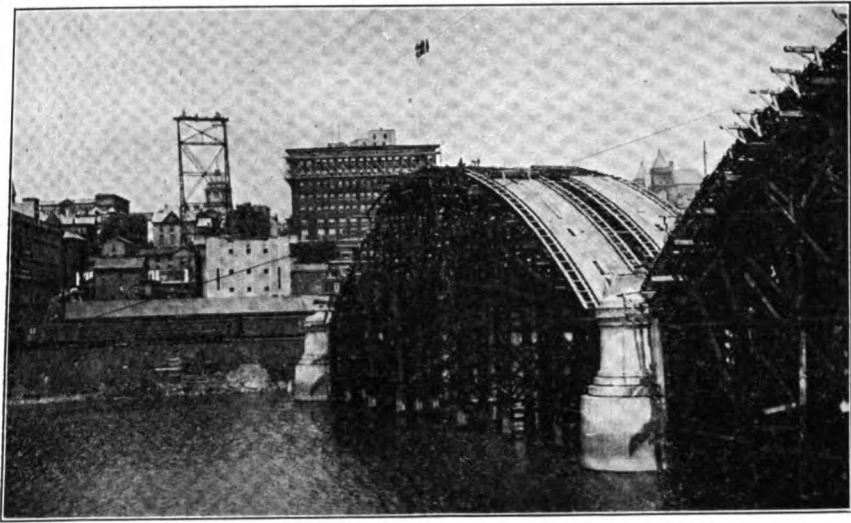
Lack of this knowledge has cost some people a great deal of money for repairs.

Graphite greases made of common, cheap graphite are positively injurious to all bearings and especially so to delicate bearings. The selected Flake Graphite used in the various Dixon Graphite Lubricants is the only kind of graphite that will not cut or pack or ball up in bearings.

Beware of the man who tries to sell you lubricants that "contain Dixon's Graphite" or that are "as good as Dixon's."

There is no such thing as a cheap, good graphite lubricant.

Write for Booklet No. 190-C.



Waterproof Grease for Bridge Constructors

IT doesn't appear in the illustration, but Dixon's Waterproof Graphite Grease is nevertheless one of the factors which are bringing this bridge to completion.

The bridge is being built across the Monongahela River at Fairmont, W. Va. It comprises three main arches of concrete-steel and the necessary approaches, the total span of the main section being about 750 feet. The Concrete-Steel Engineering Company of New York City are the engineers and the contractor is the John F. Casey Co. of Pittsburgh, to whom we are indebted for the excellent picture.

Extending over the entire structure is a two-cable aerial tramway used for distribution of materials. This shows very clearly in the illustration above. There is included in this system a total of 13,000 feet of

wire rope—all of it exposed to the elements and under heavy load. Since April, 1919, Dixon's Waterproof Graphite Grease (Wire Rope Lubricant) has been used to lubricate the cables and to prevent corrosion. A recent inspection showed that the cables were as good as when new. Experienced men who are working on this job state that in the past twelve years they have found Waterproof Grease unequalled for this class of service.

The use of this lubricant as a wire rope dressing is discussed in one of our descriptive booklets—many suggestions of interest to construction and mining engineers for a more extended use of Waterproof Grease are included. There is a copy of this booklet, No. 190-W, awaiting the receipt of your postal.



A Modern Bottling Plant

THE present consumption of the so-called "soft drink" has reached such proportions that the beverage manufacturers are forced to adopt the most up-to-date and efficient apparatus to keep production equal to the demand. We are illustrating a small portion of the interior of the Coca-Cola Bottling Company's plant at Atlanta, which gives some idea of how production is speeded up through the aid of automatic machinery.

The bottling machine is built and installed by the Liquid Carbonic Co., of Atlanta, Ga., and is only one of many similar machines used in this bottling plant. The empty and

clean bottles are fed into the machine from a rack in the rear, and the plungers under the bottles are automatically elevated, forcing the mouths of the bottles against the filling nozzles. The bottles are then filled under pressure from the reservoir on top of the machine. The table carrying the plungers and bottles is revolving constantly and during one revolution each bottle is filled, capped, and discharged from the machine at the rear. An automatic conveyor takes them to a table where they are placed in wooden boxes by hand and then conveyed to the shipping room.

The lubrication of certain parts of

the machines is rendered difficult, due to the presence of carbonated water. The plungers and the raising arms underneath them formerly required lubrication once, and sometimes twice, daily because the charged water quickly washed away the grease used. Dixon's Waterproof Graphite Grease is now giving very satisfactory service on these parts, one application lasting for a week or more.

Honorable Mention

ONE of the largest producers of petroleum in the celebrated Tampico oil district of Mexico recently wrote as follows:

"July 27, 1920.

"When our men do pipe fitting or put in a gasket or replace a cylinder head, what do they use to prevent rusting and to insure the joint being opened quickly when necessary? Ten to one, it is not flake graphite mixed with cylinder oil. Home-made mixtures are good, but Dixon's prepared graphite compound is better, *so we use it*; that is the message.

"(Signed) — — —."

We are human enough to like to have complimentary things said to us about our products, and therefore appreciate the above encomium to Dixon Graphite Joint Compound.

Sooner or later you will "discover" the merits of Dixon's P. J. C. and get the thrill that accompanies all important discoveries. Anyone who is interested in the installation and maintenance of piping for oil, water, steam, or what-not will do well to ask for a sample.



New York Central Railroad Bridge

Canajoharie, N. Y.

EIGHT YEARS' PAINT SERVICE

THE structure illustrated above was painted in 1912 with Dixon's Silica-Graphite Paint, a service of eight years without repainting.

This bridge leads to the famous Beech-Nut Packing plant, whose products, like the Dixon products, are known world-wide for service and quality.

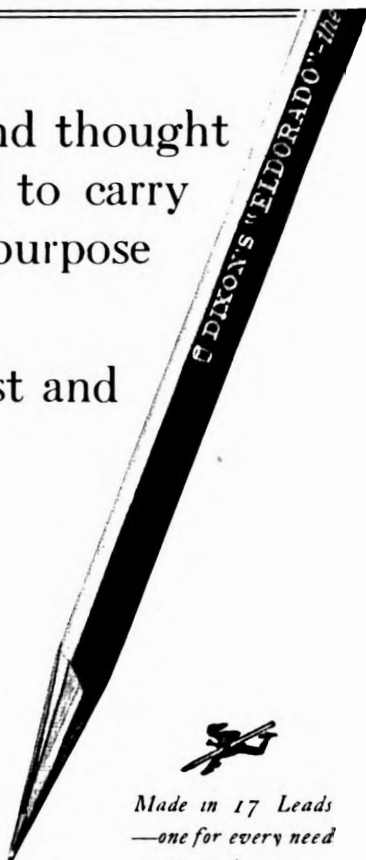
The Beech-Nut Packing Company have been users of Dixon's Silica-Graphite Paint for many years, which, we believe, is a recommendation in itself.



Trying to find a short road to success would make good epitaphs for the vast multitudes of failures.—*Success.*

No need for second thought
about the *pencil* to carry
in stock for *any* purpose
and *any* person.

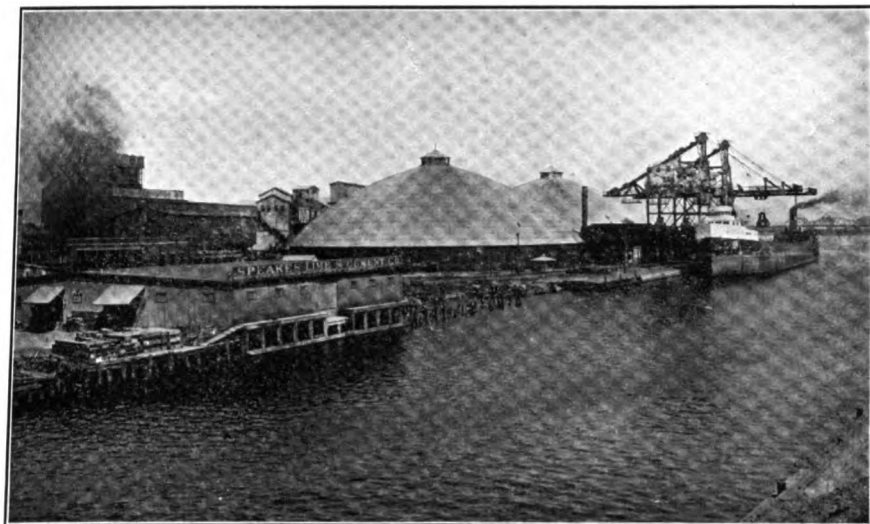
Your first and last and
best thought is



Made in 17 Leads
—one for every need
or preference

**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto



**Plant, Lehigh Valley Coal
Sales Co.,
Superior, Wis.**

TEN YEARS' SERVICE

THE American Bridge Company erected the coal wigwams illustrated above in 1908 and applied two coats of Dixon's Silica-Graphite Paint. In 1918, after a service of ten years, Dixon's Paint was applied to the roofs only, the sides not requiring repainting.

Dixon's is widely used in the Lake States on important buildings like the Lehigh Valley Coal Sales Company, because it is almost an everlasting protector, triumphant against attack by dampness, dust, gases, cold, heat, and other deleterious conditions.

Note the architectural daring of our great West! There are numbers of circular roofs in the West—none in the Eastern States. Our West certainly is individualistic.

Crucible Service

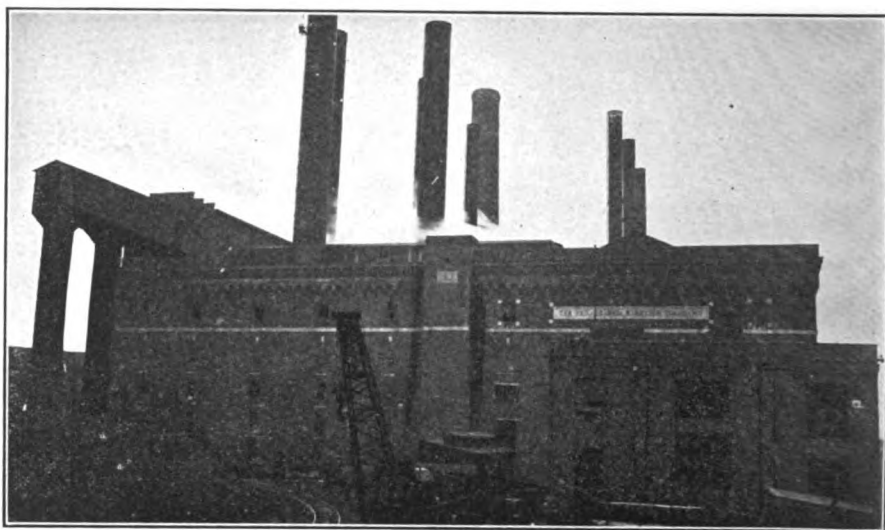
**JOSEPH DIXON CRUCIBLE CO.,
Jersey City, N. J.**

I was requested by Mr. —, who is on his vacation, to give you the information about your crucibles.

These crucibles were set next to a radiator for about four months before using. One of them gave us 58 heats of red brass, another 44 heats of aluminum and one 42 heats of yellow brass. Of the balance that we have used, the average is 38 heats. We used one to run down silver twice a month, which gave us 20 heats. This, we think, is equal to 40 heats of brass. We find that in using Cornell Flux, the flux eats into the crucibles on a level with the top of the metal.

We have used several makes of crucibles, but we have not had such good results as with yours.

**BAUSCH & LOMB OPTICAL CO.,
(Signed) Geo. J. J. Mears.**



Power Plant, Philadelphia Electric Co.,

Philadelphia, Pa.

THE illustration above shows the nine smokestacks of the Philadelphia Electric Company painted with Dixon's Silica-Graphite Paint by "Steeplejack Hassler," of 681 North Broad Street, Philadelphia. This intrepid climber scaled the high Morris Building, Philadelphia, with only a 1½-inch hold. Some nerve!

"Steeplejack Hassler" is a scientist as well as a courageous climber. He knows it does not pay to risk the life of structures by applying a short-lived, cheap paint. He has applied Dixon's Silica-Graphite Paint to many steeples, smokestacks, poles, etc.

"Steeplejack Hassler" is seen on the top of the smokestack to the left.

It will pay you to send for our free booklet No. 190-B, "Painting the Smokestack."

Dixon's Everlasting Graphite Axle Grease

DIXON'S Graphite Axle Grease is the most durable and efficient of all axle lubricants, and an article that has been famous for many years, for both light and heavy carriages and trucks.

A pound of this grease will last as long as three or four pounds of any other axle grease. It stays in the axle boxes and does not drip. A hot box is an impossibility in the presence of flake graphite. Saves time and labor required for frequent greasing with ordinary grease. These features should be considered when comparing prices.

This grease is popular in tropical countries because common axle lubricants will not stand the heat.



Nerve us with incessant affirmatives. Don't bark against the bad, but chant the beauties of the good.

—Emerson.

Dyke's Automobile Encyclopedia

Twelfth Edition

THIS remarkable book has again been revised and greatly improved. It could appropriately be termed a "Repairman's Guide." In addition to its mass of information on automobiles, covering every detail from the construction and repair of the axle to the repair of radiator and top, many new subjects have been added. For instance: how to make electric tests of the starting motor, generator, battery, coils, magnetos, etc. In fact, the subjects are dealt with in such a simplified manner that one can almost understand by a mere glance at the numerous illustrations.

Then there are many other subjects which the average repairman must know about, such as fitting pistons and piston rings, etc. In order to do this work intelligently he must know how to work in thousandth parts of an inch. This subject is so simplified, even the layman could do this work after studying the instructions.

The book covers practically every phase of the automobile industry and deals with automobiles, trucks, tractors, motorcycles, airplanes, airplane engines, including the Liberty engine, fully illustrated.

There are supplements with 332 illustrations on the Ford and Packard cars, part printed in colors. Every detail of the Ford is explained. There are also five colored inserts, a dictionary, and a lot more of valuable information too numerous to mention. The author, Mr. A. L. Dyke, is a pioneer. He originated the first auto-

mobile supply business, published the first practical book on automobiles, and manufactured and marketed the first constant level (float feed) carburetor in America. Mr. Dyke's latest origination is that of working models of parts of the automobile, for instruction by mail.

The book is published by A. L. Dyke, St. Louis, Mo. During the war it was used extensively by our Government and was also sanctioned for use in the Schools of Military Aeronautics, England. Now used by leading automobile schools.



Niles Garden Canning Co.
Manteca, Calif.

FOR the past ten years Dixon's Silica-Graphite Paint has protected the smokestacks illustrated above, and it has always given excellent service.



Keep Them Happy

Gears are just like folks. They can't work well when they're out of sorts.

Dixon's is a regular gear tonic. It keeps 'em fit. It's awfully greasy stuff, but once your gears sink their teeth into it, you'll notice a big improvement right away.

DIXON'S Gear LUBRICANT

Dixon's puts a smooth slippery film of lubricant between your gears that keeps out friction and noise. It's a lasting film too, because Dixon's doesn't "squeeze out" under a load. It can't crawl back in a corner and let your gears run free and dry. Nor is it affected by heat or cold like ordinary lubricants.

In short, Dixon's will do this for you. Give you more miles per gallon of gas—less expense.

Ask for Dixon's 677 for your transmission and differential.

Also Dixon's Cup Grease and other famous lubricants.

JOSEPH DIXON CRUCIBLE COMPANY

Established 1827



Jersey City, N. J.

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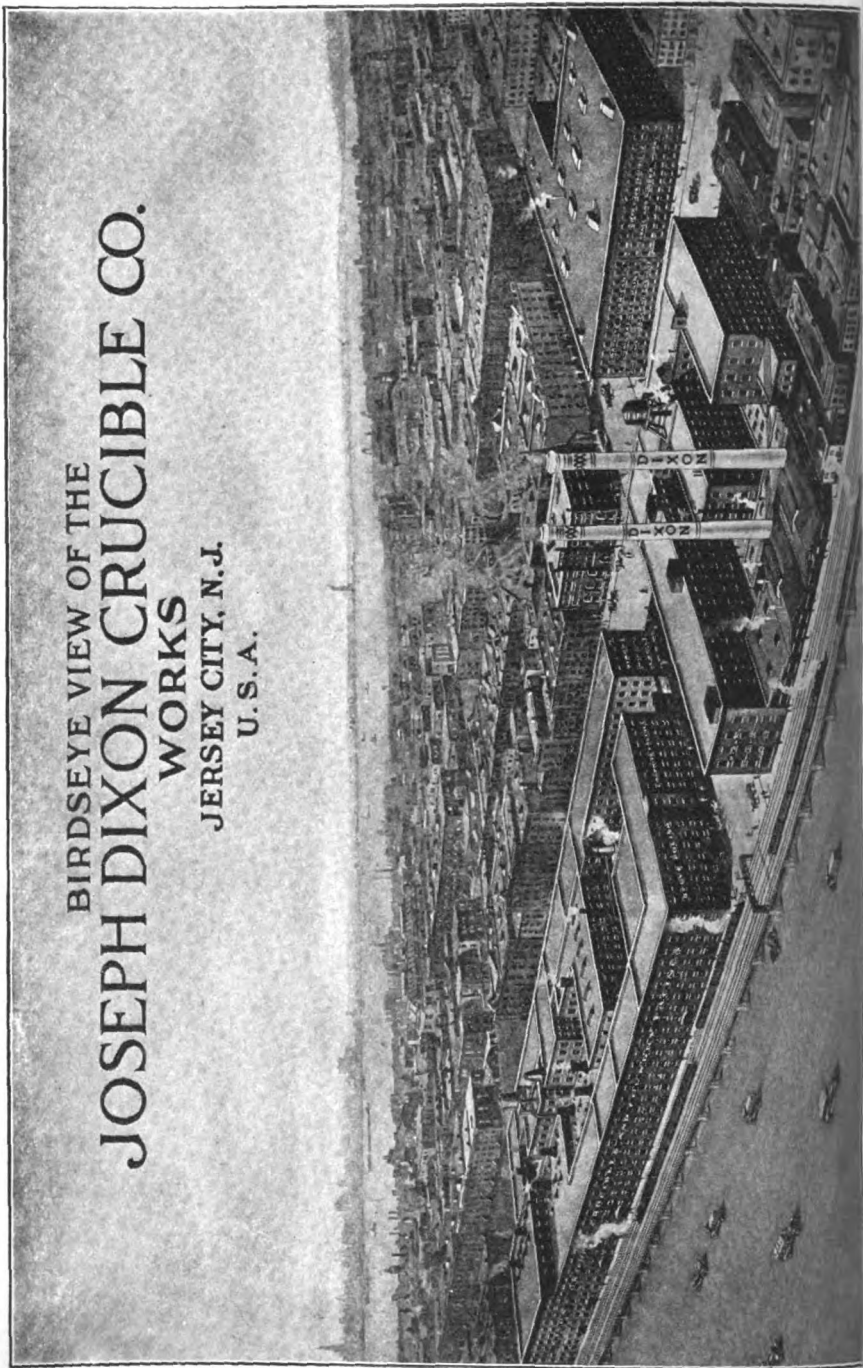
VOL. XXII

OCTOBER, 1920

No. 10



BIRDSEYE VIEW OF THE
JOSEPH DIXON CRUCIBLE CO.
WORKS
JERSEY CITY, N. J.
U. S. A.



Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

OCTOBER, 1920

Number 10

A Note on Mexican Church Architecture

MEXICO is a land of churches. Churches with domes. Everywhere you see the characteristic domed architecture in the town church or more pretentious cathedral. Most of the domes are covered with colored tile giving a charming effect, and a striking note of contrast in the landscape and as well reflecting the Moorish and Saracenic origins in much of this architecture.

There is an effect of richness combined with lavishness and at the same time a lack of refinement, a certain barbaric expression of profuseness and crude ideas and ill-balanced masses. The dome is always a marked feature of the exterior, and sculpture and color are everywhere profuse in the interiors. Some of the old altar pieces and religious paintings are rich in their coloring and many of the latter have been attributed to famous old masters. But the Spanish Colonial as manifested in Mexico has an unflinching interest for every traveler, and here and there are churches that are really beautiful and worthy of serious consideration.

Many of these churches date back as far as the sixteenth century and beginning of the seventeenth. They stand out with striking distinctness in the Mexican atmosphere with every detail revealed.

Mr. Horter has succeeded admirably in his pencil drawing in giving an impression of the old church of Guanajuato—its picturesqueness, its light and shade in the Mexican sunshine, its characteristic ornament and other architectural features. There is no medium more charming when skilfully handled than the pencil—none so readily available for both artist and traveler.



It is not good to be idle:
It is not good to waste:
It is not good to want:
Work, and waste not: want not.



HONEST men never grow tired of bread or of any other daily thing whereof the sweetness is in their own simplicity.—*Meynell*.



Mr. L. G. Sloan, Director

New Dixon Pencil Representatives for Europe, Africa, and India

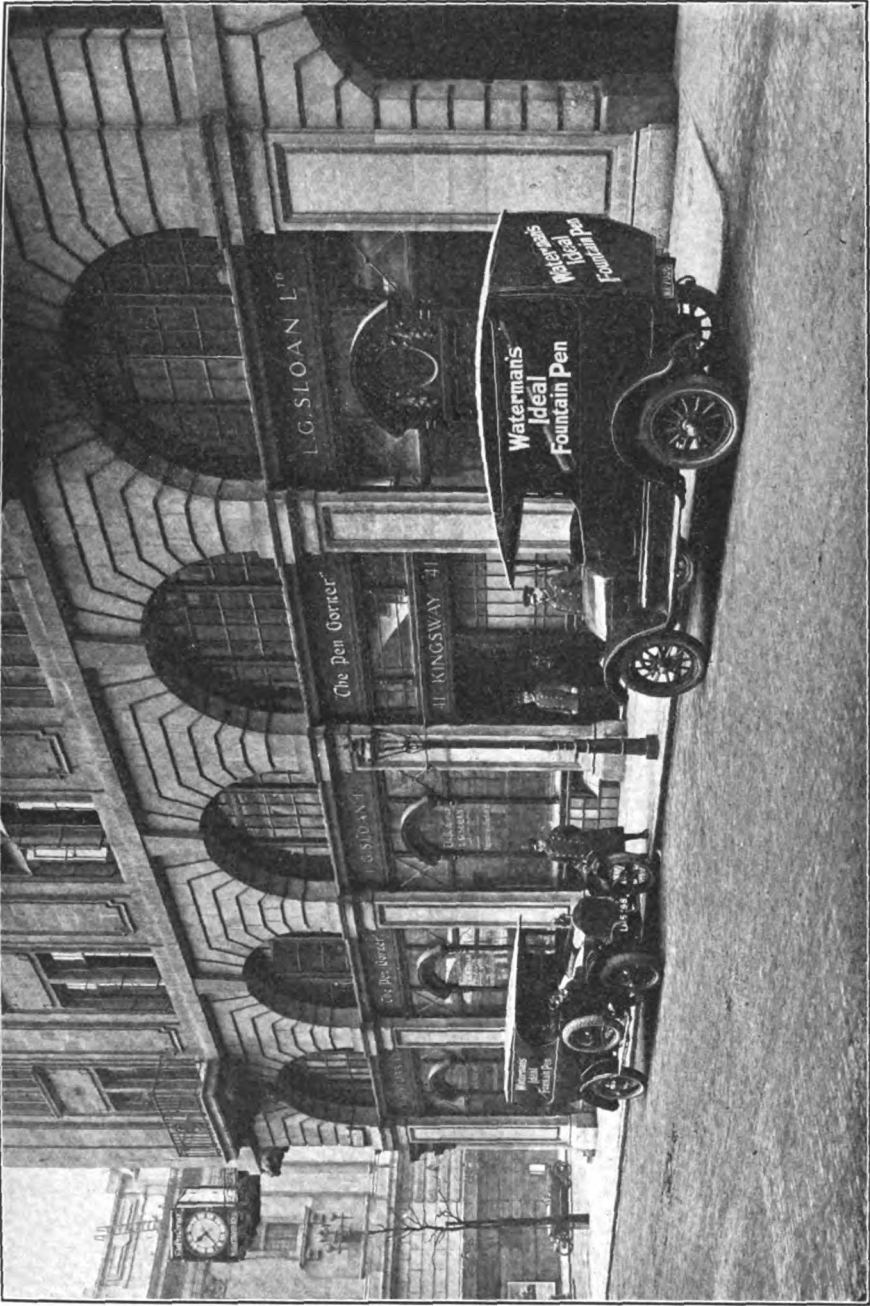
IT is with great pleasure that we announce L. G. Sloan, Ltd., 41, Kingsway, London, W.C. 2, England, as our sole representatives for the marketing of Dixon's pencils, crayons, and erasers in Europe, Africa, and India. It is especially gratifying when mutual interest and respect over a considerable period can develop into such tangible form.

It has always been our aim to have the name "DIXON" merit respect, through the high quality of our merchandise and through the integrity of our dealings. It is needless, therefore, to express what a genuine satisfaction it is to us to have our name linked up with the name of another business institution which, through the test of time, has earned recognition for reliability and intelligent progressiveness.

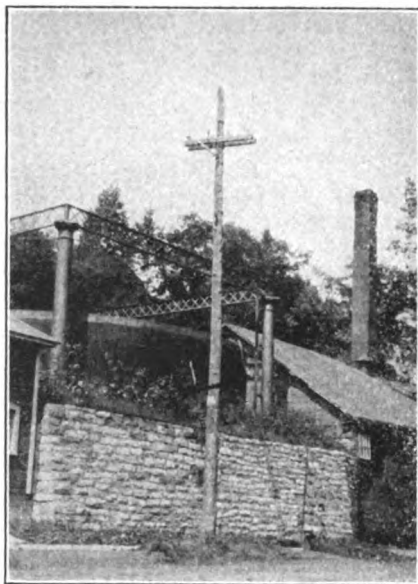
We should not presume to say to the members of the trade in the countries mentioned anything of an informational character regarding Mr. L. G. Sloan and his organization: they have had ample opportunity to know intimately the character

and policies of this well established house. Our friends and patrons on this side of the Atlantic, however, will understand, we believe, our feeling in having L. G. Sloan, Ltd., added to the Dixon "family" of marketing representatives, when we say that this house is headed by a man whose business ethics and ideas are in close sympathy with our own.

The one regret shared by L. G. Sloan, Ltd., and ourselves is that, under the present difficulties of rapidly expanding our production, we are unable to allot to Europe, Africa, and India as large a percentage of the output of our factories as these markets could absorb. It is our earnest hope, however, that in due season we shall find means of substantially increasing our production, so that L. G. Sloan, Ltd., will be able to achieve in their fields the merchandising success for DIXON'S pencils, crayons, and erasers which they have accomplished for our friends and neighbors, The L. E. Waterman Company, manufacturers of Waterman's "Ideal" fountain pens.



L. G. Sloan, Ltd., 41, Kingsway, London, W. C. 2, England



Gas Holder, Fort Plain Gas & Electric Light & Power Co.

THE above illustration shows the gas holder owned by the Fort Plain Gas & Electric Light & Power Co., Fort Plain, N. Y., which has been protected with Dixon's Silica-Graphite Paint for over twenty years, repainting occurring every four or five years.

"We have used Dixon's Silica-Graphite Paint for over 20 years, and up to this writing it is a 'laster' on roofs and other metal-work.

"Over 20 years ago we erected a new gas holder and painted it with Dixon's Paint. It is our practice to paint the holder with *one coat of Dixon's Paint* every 4 or 5 years. We find the holder and paint in excellent condition. Very truly yours,
(Signed) A. A. MILLER, Supt."

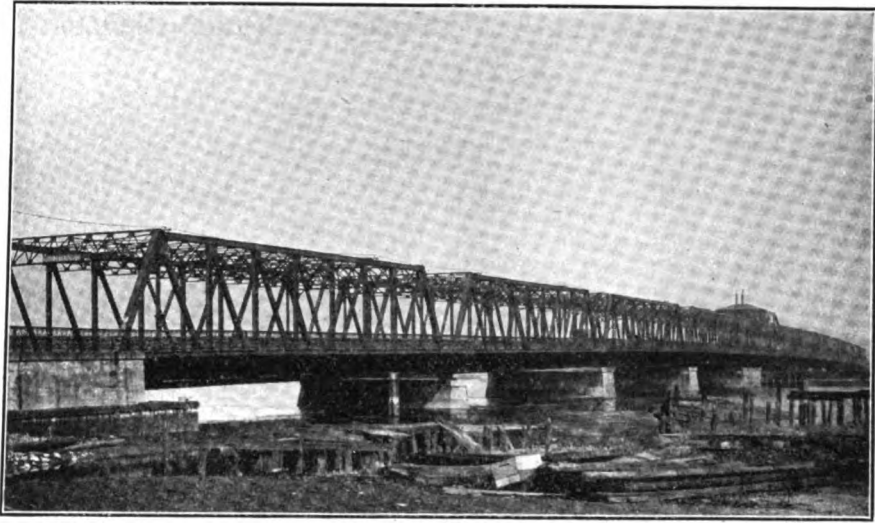


Pencil or Ink
marks satisfactorily
removed
by

DIXON'S NO. 860



A good combination



Lincoln Highway Bridge

Over Hackensack River, connecting
Newark and Jersey City, N. J.

ELEVEN YEARS' PAINT SERVICE

PROTECTED with Dixon's Silica-Graphite Paint for eleven years; painted in 1909, and again in 1920.

Mr. T. J. Wasser, county engineer; J. I. Hass, Inc., contracting painters.

This bridge is one of the best known in the nation. It carries 70 per cent. of the vast vehicular traffic from New York going west and south. It is frequently swung open to pass the growing river traffic, Newark being now a deep-sea port, destined to have a great future as such; and Jersey City also will have deep-sea dockage.

Come east, and see our shipping and dockage and the service Dixon's Silica-Graphite Paint is giving.

Dixon's Paste Belt Dressing and Leather Preservative

DIXON'S Traction Belt Dressing preserves the leather and restores the lost efficiency and clinging power of neglected belts. It likewise gives new belts elasticity and flexibility, so that only a heavy overload can cause them to slip.

Dixon's Traction Belt Dressing imparts clinging power, not stickiness; does not readily gather dust, and thoroughly waterproofs the leather.

In paste form, to be applied warm in small quantities. One pound of dressing should put 80 square feet of leather belting in proper order.

It is also an excellent dressing for manila transmission cables (except those having a metal core). It penetrates into the cable, waterproofs the fibres, keeps them flexible and prevents rotting.

Care and Maintenance of Plunger Hydraulic Elevators

By A. B. Burgess

Courtesy of "POWER"

Every operating engineer having to do with plunger-type elevators has certain rules which he follows in their inspection and care. A few general suggestions which, if followed, will keep the maintenance cost of this type of elevator at a minimum, are given here.

THE most expensive operation in the construction of a plunger-type elevator is drilling of the cylinder hole and setting the cylinder. Hence it is of vital importance to see that this part of the machine is given a periodic inspection to prevent it from wearing out and thereby necessitating a replacement.

The plunger, passing through the stuffing-box at the top of the cylinder, is guided by several types of plunger bottoms. In the short-rise cars two types of bottoms are used, either the button plug, Fig. 1, or the wing plug, Fig. 2. These cars, traveling at a slow rate of speed, do not offer much chance for wearing through the bottom of the plunger or of grooving the cylinder.

Quite a different condition exists in the high-rise, high-speed passenger and freight elevators. Two general types of bottoms are here used to guide the plunger and to hold it central in the cylinder. The brush-type, Fig. 4, consists of three or four brushes of wire, held in a special form of casting. The other type of bottom, Fig. 3, has composition skates substituted for the brush. Springs are used to hold these parts away from the bottom, causing them to bear on the inside of the cylinder, thus holding the plunger in a central position in the cylinder, throughout the travel. The continual motion of the plunger causes the brush or skate to wear away gradually, and unless these parts are inspected at least once a year, preferably every six months, the chances are that the brush or skate will be found entirely worn out and the plunger bottom cutting or grooving the cylinder,

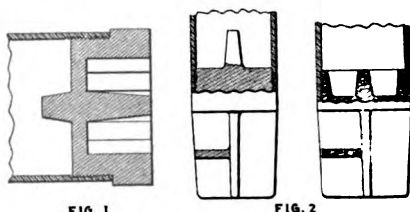


FIG. 1
FIGS. 1 AND 2. PLUNGER BOTTOMS FOR SHORT-RISE PLUNGER ELEVATORS

eventually making it necessary to renew the cylinder.

To make an inspection of the brushes or skates, remove the counterweight buffers in the pit, run the elevator to the top landing, close the supply and exhaust valves, make a hitch on the counterweight frame and the bottom of the pit with a chain hoist or heavy tackle, and hoist the car in this manner until the brushes are exposed. It will be necessary to remove the top automatic hitch.

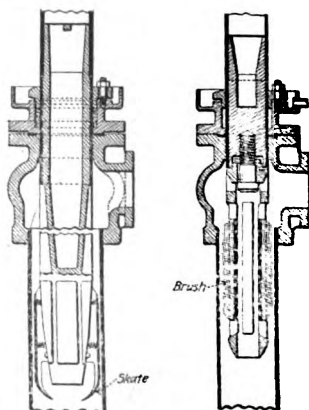


FIG. 3. SKATE-TYPE PLUNGER BOTTOM

FIG. 4. BRUSH-TYPE PLUNGER BOTTOM

The plunger itself should be lubricated once a week with graphite grease or an especially prepared compound. Oil is

too light a substance to use when greasing the plunger. To lubricate the plunger, run the car slowly to the top, wiping off all the water. Then allow the car to descend slowly, applying the grease evenly with the hands. In some cases a lubricating ring or cup has been attached to the stuffing-box, in which grease is put at regular intervals, every trip of the elevator causing it to be lubricated automatically.

A daily inspection of the stuffing-box, Fig. 5, through which the plunger travels, should be made, and in case of leakage the gland nut should be tightened evenly, say a quarter of a turn at a time, to insure the same relative bearing, until the packing needs renewing.

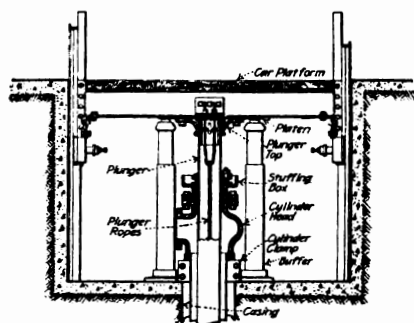


FIG. 5. SECTION THROUGH ELEVATOR-SHAFT PIT AND STUFFING-BOX

To repack the plunger, run the car up sufficiently high to work under it and block it. Shut off the valve in the supply line, then raise the stuffing-box gland to get at the packing space. Remove the old packing and cut the new in proper lengths to fit the plunger snugly. When the space is filled and the packing firmly in place, put the gland back and take up the nuts hand tight. Square flax or brake tubing is commonly used. There are a number of special packings on the market.

Car and counterweight rails should be wiped down and greased with cylinder oil, or a very light grease, once a week. Fiber runners are furnished in both car and counterweight guide shoes, and should be subjected to weekly inspection.

(To be continued)



Smoke-stack, Buffalo Brewing Company Sacramento, Cal.

THE smoke-stack and other metal-work around the plant owned by the Buffalo Brewing Company, of which Mr. F. C. Weil is Manager, is protected with Dixon's Silica-Graphite Paint.

Mr. Weil is an able and economical manager, and that is why he chose Dixon's Paint to protect the structures shown in the illustration.

Dixon's Brake Cylinder Grease
ASSURES dependable, sensitive action of brake cylinders and triples of railway cars under all weather conditions.

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII OCTOBER, 1920 No. 10

Tremendous Trifles!

THE little things have a way of escaping our attention. "Trifles," we say to ourselves. "We must attend to the bigger things to get on."

But it is none the less true that success is made up of small and big things taken all together and managed effectively.

Here are three sayings about the importance of trifles:

"Take care of the pence and the pounds will take care of themselves."

"Perfection is made up of a million trifles. But perfection is no trifle."

"Genius is an infinite capacity for detail."

Of the three, we like the last the best. Such genius is surely heaven-born.

"I Had To,—and So I Did"

I HAD to do it,—and so I did it," is a sentence containing a sound philosophy of living.

"An honest man struggling in adversity is a sight for the gods," is the way an ancient people expressed their respect for the man who fights on, doing many things, not necessarily because he would have chosen

to do them, but faithfully carrying on through thick and thin.

And when everything has been said, the every-day work—the essential work—of the world is carried on by those who buckle to the task, with eyes and mind intent on their occupation, leaving to the "born rebels," who "toil not, neither do they spin," the dream of remaking an altogether ungrateful and deprecatory universe!

The Thirteen Mistakes in Life

1. To attempt to set up your own standards of right and wrong.
2. To try to measure the enjoyment of others by your own.
3. To expect uniformity of opinions in this world.
4. To fail to make allowances for inexperience.
5. To endeavor to mold all dispositions alike.
6. Not to yield to unimportant trifles.
7. To look for perfection in our own actions.
8. To worry ourselves and others about what cannot be remedied.
9. Not to help everybody, wherever, however, and whenever we can.
10. To consider anything impossible that we cannot ourselves perform.
11. To believe only what our finite minds can grasp.
12. Not to make allowances for the weaknesses of others.
13. To estimate by some outside quality when it is that within which makes the man.

—Geyer's Stationer.

The New Dixon Pencil Packing

IN the stationery business beautiful and convenient packages vie with one another on the shelves and counters of wholesaler and retailer. The stationer takes a pride in his stock and in his arrangements for handling and displaying it. And the number of articles carried in your up-to-date stationery store is legion compared to that of such a store twenty-five years ago. Consider how well arranged they are for your inspection, and how clean and ready for instant use are the articles themselves after you have opened them in your own establishment.

We have given much thought to the Dixon packages for some time past, experimenting with colors and shapes of labels and boxes. Our aim has been to simplify, and make attractive and convenient, the Dixon labels and containers.

That the reader may see quickly what we have done, we refer him to the illustration on the center spread of standard Dixon half-gross packages with carton labels, according to our new system.

HALF-GROSS CARTONS AND BOXES:

These are standardized in one shape and three colors as follows: Dixon's ELDORADO—"the master drawing pencil"—blue; Dixon's Ticonderoga, tipped and untipped, buff with green trimming; all other styles, gray with green or red trimming.

NOTE: Green, wherever it occurs, whether on the dozen-wrapper label, box-end label, or carton trim, indicates a high

quality product. Where red is seen on a label or box, the product within is of middle quality and price.

The attractiveness of these cartons is further enhanced by a specially made paper. This paper is blind embossed, as shown in the illustration. It is certain that the use of this special paper on the Dixon half-gross cartons will make it very easy for a stock clerk or salesman, whatever side or part of the carton his glance may light on, to distinguish a Dixon package.

DOZEN PACKAGES:

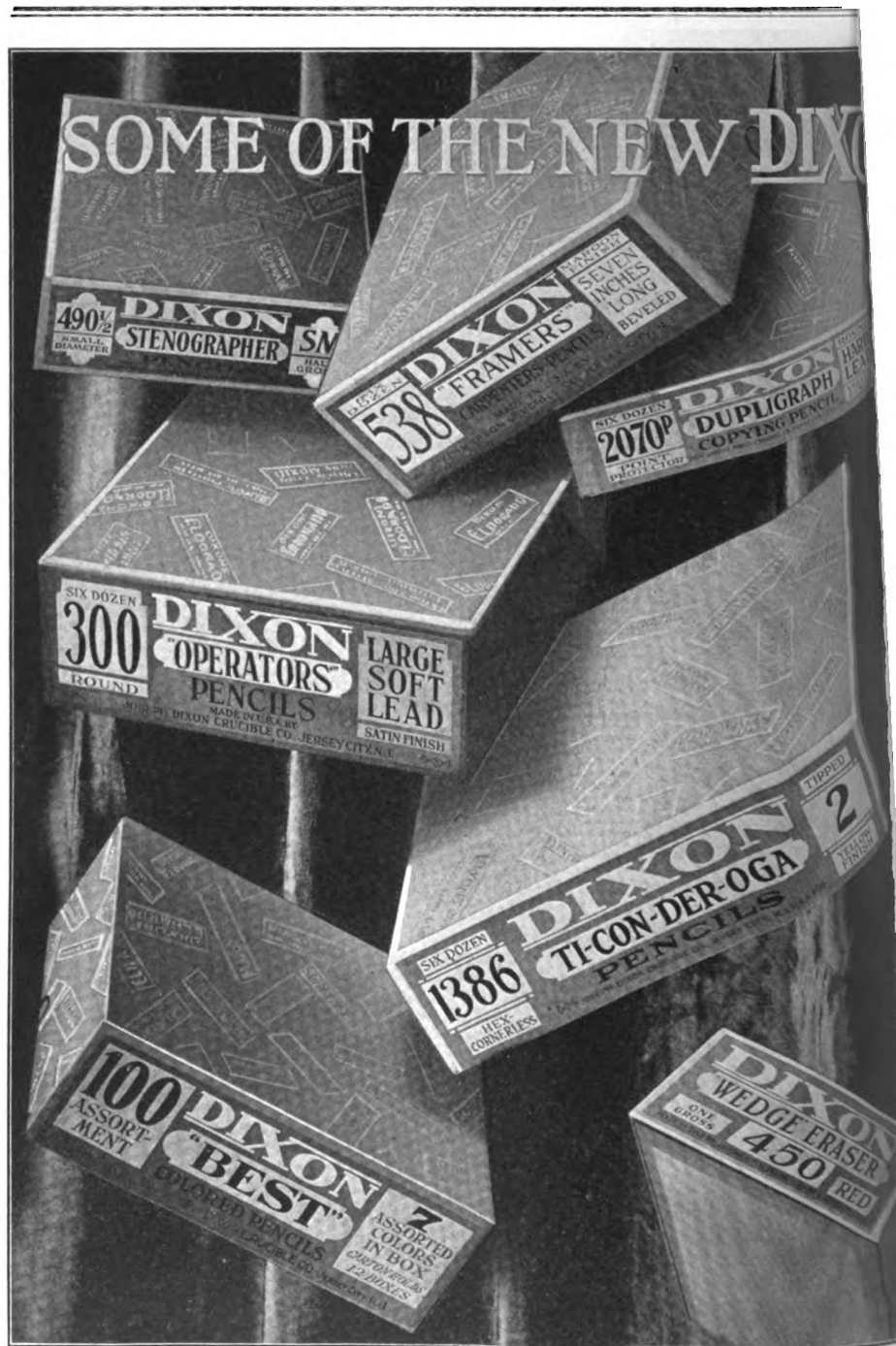
There are three kinds of dozen packages, as follows: Dixon's ELDORADO blue dozen box; Dixon's Ticonderoga buff dozen box; the flat patent Dixon dozen package.

LABELS FOR CARTONS:

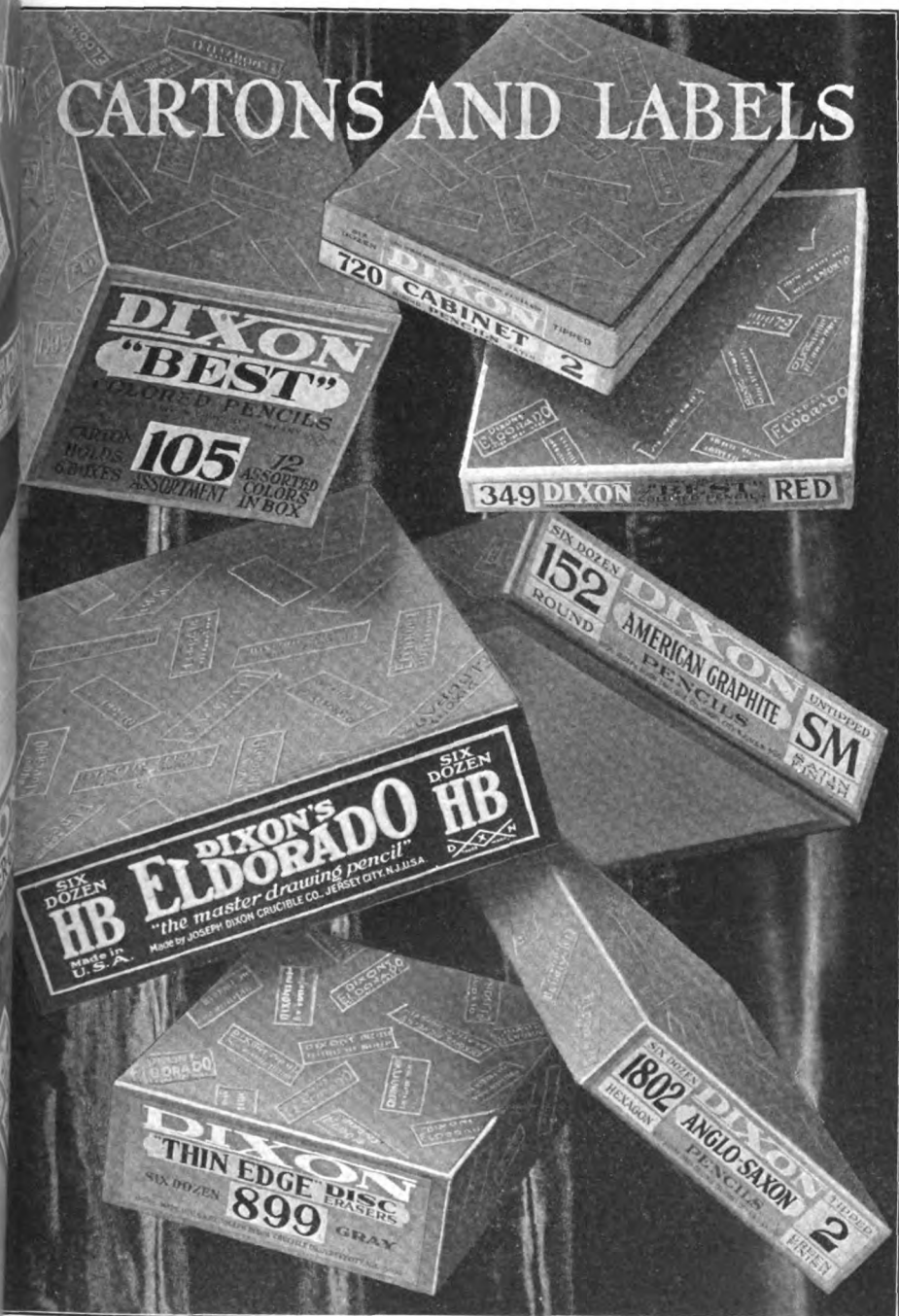
These are so designed as to tell the customer, sales or stock clerk at a glance the name of the maker and the name of the brand, together with information as to shape, color, and general make-up of contents. These carton labels are green and red: green for high quality, and red for middle quality goods.

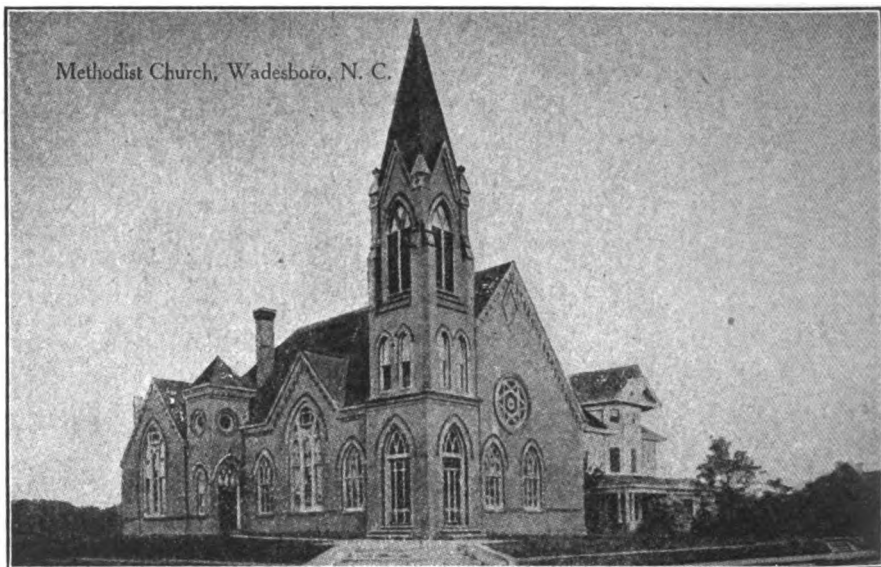
DOZEN WRAPPER LABELS:

These are gray. The name of the pencils is printed in blue on a white ground, surrounded by either green or red border. As already explained, the green denotes high quality and the red middle quality goods.



CARTONS AND LABELS





Roof, Methodist Church, Wadesboro, N. C.

A TWENTY YEARS' PAINT SERVICE

DIXON'S Silica-Graphite Paint gave twenty years' service on the roof of this church.

Dixon's Paint is widely used for church roofs and church metalwork all over the country. It not only lasts longer and saves in labor charges, but it also gives a good appearance.

Church trustees and superintendents, make a note and use Dixon's!

Laws of Nature

NOTHING in Nature is permanent; everything is constantly changing. Day changes into night, fair weather into foul, plants and animals die and decay, and even the solid rocks gradually wear away into

soil or sand. These changes do not occur by chance, but each is the result of some definite law of Nature.

After more than fifty years of experience, guided by innumerable records, and tests under all conditions and climates, the Dixon Company adheres to the belief that what a protective paint will do, and what it costs to do it, are the real considerations in the value of a protective paint. Fifty years of experience and watchful care in keeping accurate records of results warrants this company in proclaiming

DIXON'S SILICA-GRAPHITE PAINT

the unequaled protective paint for all metal or wood work.

To its enduring quality is added its fine appearance. Made in four colors—Black, Natural (Dark Gray), Olive Green, and Dark Red.

DIXON'S ELDORADO

the master drawing pencil

Is the complete and final answer to the call for the best pencil for any purpose a lead pencil can serve.

Recommend "ELDORADO" to your customers to ease and quicken their pencil work.



*Made in 17 Leads
—one for every need
or preference*

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto



An Invitation to Stationers from St. Louis

Greetings:

St. Louis
 An American City
 In Which
 Many Chapters
 Of the Romance
 Of Business
 And of the
 Growth of This
 Republic
 Have been Written
 Extends to You
 Stationers
 Of the U.S.A.
 An Invitation
 To Attend
 The Great Convention
 Of the National Stationers
 And Manufacturers Ass'n
 October 11, 12, 13 and 14.
 Now a Word
 To the Wise
 Sufficeth
 And
 Mr. Wm. J. Kennedy
 Chairman Hotel Committee
 212 N. 4th Street
 St. Louis
 And
 Mr. H. P. Dotterer
 Secretary Hotel Committee
 320 N. 3d Street
 St. Louis

Do Desire
 YOU to Know
 This:
 Hotels are Filling
 UP
 And a Reservation
 In Time
 Is Worth
 Many belated Telegrams
 At the Last
 Moment.
 Safety First.
 Write to Either
 Gentleman
 TO-DAY
 What Accommodations
 You Need
 And
 What is More
 Resolve to Be
 In St. Louis
 The Morning
 Of October the
 Eleventh
 Bright and
 Cheery
 Ready to Play
 Your Part
 In the Proceedings.

Yours, for a Great
 Convention,
 The COMMITTEE on
 PUBLICITY.

Guide Post



THE art of erasure is a fine art. Correcting mistakes is no child's play. "It is easier to do it right first," is good advice, and, therefore, very frequently disregarded in the hurry and rush of commercial striving.

We are obliged to "rub it out" continually. Hence the need of tools with which to do this work.

Shapes, sizes, and textures of erasers are various and numerous. This shape suits one hand, that shape another. This has the right touch for one sort of paper, that for another sort. The story is interesting, but long,—and as life is short, the Guide Post must be brief. And so we choose three famous Dixon Erasers to talk about.

No. 450 "Wedge" eraser. This fits on the end of your pencil. It assists in holding the pencil in your pocket or on your desk. When the pencil chances to fall, the little No. 450 reaches the floor first, so the lead has a better chance to remain intact. It outlasts a number of the regulation rubber plugs used on tipped pencils. It does a first-rate job of erasing pencil marks. It is of the medium soft, red variety, and stays pliable and useable down to the last. It is

in every respect a sensible, convenient, economical pencil eraser.

Dixon's "Thin Edge" Disc is for the tidy typist; for the one who insists on neat erasures with uninjured paper. The composition of the "Thin Edge" is right for the purpose; and the "thin edge" adds the final touch of perfection. This "thin edge" takes out even single letter errors without blurring the remainder. It is useable all the way through to its metal center. Ask your own typist for an opinion.

The Dixon 860 Eraser is a combination: pencil eraser at one end, ink or typewriter at the other. An easy-to-hold size, with convenient bevels. Effective in erasure. Stays useable until used up.

Now, there are many other Dixon Erasers made by us in our own plant at Jersey City, New Jersey. Later on the Guide Post will tell you about them. But for this time,—

The song is sung,
The day is done.

Wet—Lament—Dry

THE rain it raineth
Every day;
Confined to work,
Exit play.
The world without
'S wet, alas!
(The steam's arising
On the glass.)

But now,—the SUN!
The weather's dry;
And so am I—
So am I.

Forging Presses

ANYONE who has seen gigantic hydraulic forging presses in steel mills cannot help being impressed with the tremendous force these machines are capable of exerting. They squeeze great billets of solid steel as easily as one can compress a ball of putty in his hand. They are almost irresistible.

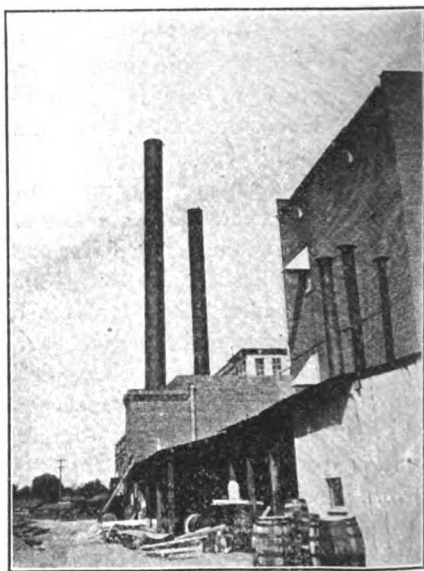
If you have marveled at the ease with which a mammoth work elephant is guided and controlled by its diminutive mahout, you will experience a similar sensation upon viewing a huge hydraulic press responding sensitively to the will of a single man. The machine seems almost human, so sure and exact are its movements.

The principles that govern the operation of hydraulic machinery are not difficult to understand, but considerable ingenuity has been required to overcome the practical difficulties. Not the least of them was to provide packing that would withstand the water pressure without leaking. Packings that are not properly lubricated are prone to grab the plunger and be pulled out of the stuffing box. That means shutting down the machine and all operations dependent on it, for considerable time, until new packing can be put in place. Time is money and so is new packing.

Packings cause no concern, however, in plants where Dixon's Waterproof Graphite Grease is used on the plungers. This grease will not wash off and leave the plunger dry, but it stays there and *lubricates*. It also thoroughly coats the packing with flake graphite and obviates any ten-

dency for the packing to stick to the plunger. These are advantages that are appreciated by the men in charge. Ordinary grease either dissolves in the water or is so gummy and non-lubricative as to eventually pull out the packing. Dixon's does neither.

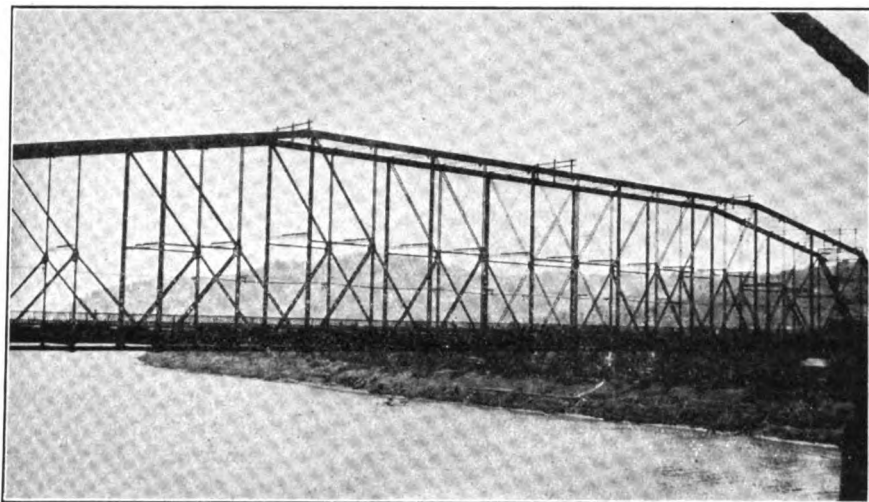
For many years Dixon's Waterproof Grease has been in high favor for all hydraulic machinery such as pump plungers, elevator plungers, presses, rams and heavy steel and sugar mill roll necks.



Smokestacks

Eilert Products Co., Fresno, Calif.

STACKS "Dixonized," which means most economically and satisfactorily painted with Dixon's Silica-Graphite Paint. It was Dixon who solved the unknown quantity "z" in the algebraic question, "economize."



Bridge, Wheeling Bridge Company

Spans Ohio River from Wheeling to Wheeling Island, W. Va.

THIS bridge, 1787 feet across the Ohio River, was painted in 1917 with Dixon's Silica-Graphite Paint, J. J. Maloney & Company, Wheeling, W. Va., being the contracting painters. Mr. A. A. Fox, Superintendent of the Wheeling Bridge Company, is a well known engineer and efficiency expert. That he chose Dixon's is a sufficient recommendation, and that Dixon's Silica-Graphite Paint has already served three years on this bridge (and is still in good condition) justifies Mr. Fox's good judgment.

Dixon's Silica-Graphite Paint is used by many of the leading railroads, bridge and other companies in all parts of the country.

Dixon's Non-leak Grease No. 680

A UNIQUE lubricant for leaky differential housings of automobiles. If the old grease is removed before No. 680 is put in there will be no further trouble from grease working out on brake bands and wheels.

A Sure Tip!

DIXON



"WEDGE" 450

**And a Sure
Enough
Eraser**

How to Lubricate Cylinders of Auto Engines

FIRST and foremost, use good oil. All the conditions are not necessarily satisfied if the *quality* is good, because viscosity and flashpoint are also essential. Unless you know more about lubrication than the makers of your car, we suggest that their recommendations be followed as to the grade of engine oil to use in winter and in summer.

At intervals drain off the oil from the crank case or reservoir, flush out with kerosene or gasoline if you have reason to think the case is dirty, and then put in clean oil. Of course it is not necessary to drain the crank case every time fresh oil is added to the lubricating system.

Whenever a quart or so of fresh oil is supplied let a teaspoonful of Dixon's Motor Graphite be inhaled through the air intake of the carburetor. This must be done while the engine is running at good speed in order to draw the graphite into the cylinders. The simplest method is to place graphite on a sheet of folded paper and hold it close to the air intake, being careful that the graphite is not blown away by the fan. There is no necessity that the introduction of graphite to the cylinders be coincidental with the addition of fresh oil, but that is about the right frequency.

Do not use more graphite than is recommended. Better use none than too much. A small amount is sufficient to keep your motor young.

Dixon's Motor Graphite is unique among lubricants. It is so fine and

unctuous that surfaces to which it becomes attached are as smooth as silk. Friction and wear are just naturally decreased to the irreducible minimum.

When properly used in the cylinders of automobiles or motor boats, it improves the compression, increases power, reduces the amount of lubricating oil required, and cures smoky exhaust. It will not burn or carbonize.

Special lubricators are on the market for feeding graphite through the air intake manifold. We shall be glad to tell you about them.

Motor Graphite may be obtained in ½-lb. tins at all the principal dealers. It is an ideal lubricant for springs and wheel rims.



Pumping Station

Associated Pipe Line Co., Fresno, Calif.

THE smokestack, tanks and other metal-work of all the pumping stations of the Associated Pipe Line Company are "Dixonized."

California is famous for petroleum and the Dixon Company, Jersey City, is famous for its Silica-Graphite Paint.

— textile mills

Dixon Textile Crayons are used in such a number of processes and on so many kinds of cloth and yarn, it is our recommendation that each mill be guided by its own experiments and experience in the selection of colors to be used.

Send for the new

DIXON COLOR CHART
SHOWING COLORS OF

DIXON
Textile Crayons
Strong-Durable-Lasting

JOSEPH DIXON CRUCIBLE CO.
JERSEY CITY, N. J., U.S.A.

Melting Furnaces

Some Factors to Be Considered in the Selection of Melting Equipment for Non-Ferrous Metals

By Thomas H. A. Eastick

(Continued)

1. No crucibles are required.

Neither are crucibles required with an oil or gas fired reverberatory furnace; on the other hand, the advantages of the crucible process are lost just as much with the electric furnace as with the fuel fired furnace. These advantages, as is well known, are the flexibility, control, ease of stirring and skimming, all resulting from the small unit or charge.

2. No coal to handle and no ashes to put through the metal recovery process.

This same advantage, of course, prevails with any "liquid" fuel fired furnace, crucible or reverberatory. By a "liquid fuel" is meant any fuel that can be transported mechanically or piped.

3. Less zinc loss.

There is probably no other question in brass making which has been discussed more, and on which more misinformation and misconception of the real facts is prevalent. The facts in the matter are that copper melts at 1083 deg. C. and zinc boils at 980 deg. C.; therefore, if we melt copper and add zinc to it some of the zinc will boil out until the alloy has cooled below the boiling point of zinc, when some zinc will still vaporize but to nothing like the extent it did when first put in. Yellow brass is usually poured at about the melting point of copper, *i. e.*, 1050 C. to 1100 C., which is 150 to 200 C. above its melting point, 875 C. If, say, 120 lbs. copper is melted and brought to a temperature of about 1150 C. and then 60 to 80 lbs. of zinc added to it, there will at first be a rapid ebullition of zinc and the loss would run high, about 3% or 4% of the total weight of metal. On the other hand, if 150 lbs. of brass scrap is melted, 25 lbs. copper added to it and "dissolved" in the bath and finally 20 lbs. zinc added, the loss should not exceed 1% to 1.5%. Under these conditions the temperature would never at any time go much over the boiling point of zinc.

Zinc loss, then, may be said to be a function of the temperature and the time the metal is held at the temperature.

The composition of the furnace gases, area of the surface of the metal, etc., have no influence. Other theoretical factors bearing on the volatilization of zinc are: the fact that a volatile liquid in solution in another non-volatile liquid has its vapor pressure for any given temperature lowered roughly in proportion to the amount of the non-volatile solvent present. In other words, it is probable that the boiling point of zinc is higher when dissolved in copper. It is a matter of common observation that brass scrap melted in the crucible loses very little zinc by volatilization as is evidenced by the lack of smoke over the pot. It is only when the metal is up to pouring heat and more zinc added that any volume of zinc smoke is observed. By melting brass in a closed chamber so as to increase the vapor pressure of zinc over the surface of the metal, it is probable that the boiling point of the zinc is appreciably raised. Electric furnaces can be thus sealed up, but unless some arrangement for distillation of the zinc were attempted, it is hard to see where such a procedure would be of any benefit because as soon as the furnace was opened to pour and the vapor pressure thus suddenly reduced, rapid ebullition of zinc would result and all the advantage be lost, beside possible bad effects.

In view of these facts, therefore, the claim that the reduction of zinc losses is an inherent feature of electric furnaces is open to considerable doubt. It seems likely that better results are being obtained with electric furnaces than before, but such results are largely due to more care being used, better grade of labor, and most important of all, more rapid melting and casting than was possible with the coal pit fires. Figures on zinc losses are valueless unless they include this information:

(To be concluded)

JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



*Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead*



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San Juan, P. R.

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Montreal, Quebec

Graphite

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NOVEMBER, 1920

No. 11



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AT JERSEY CITY, N. J.
U. S. A.

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Salesmanship from a Consumer's Standpoint

I AM not a salesman, but I am a good buyer, and have probably purchased more things that I did not want than any man of my age. Hence, it may be interesting to salesmen to listen for a brief spell to a customer's idea of what constitutes good salesmanship.

First of all, be good-natured. I now confess that nine tenths of what induces me to buy is the ability of the seller to jolly me along. Cheerfulness and signs that you feel good, enjoy life, and are full of glee inside, are better than a letter of introduction from Mr. Rockefeller.

Have a thorough knowledge of your goods, also of the other fellow's goods. Learn how they are made and when, and who makes them. Respect your customer's desire to know and fill him up with information.

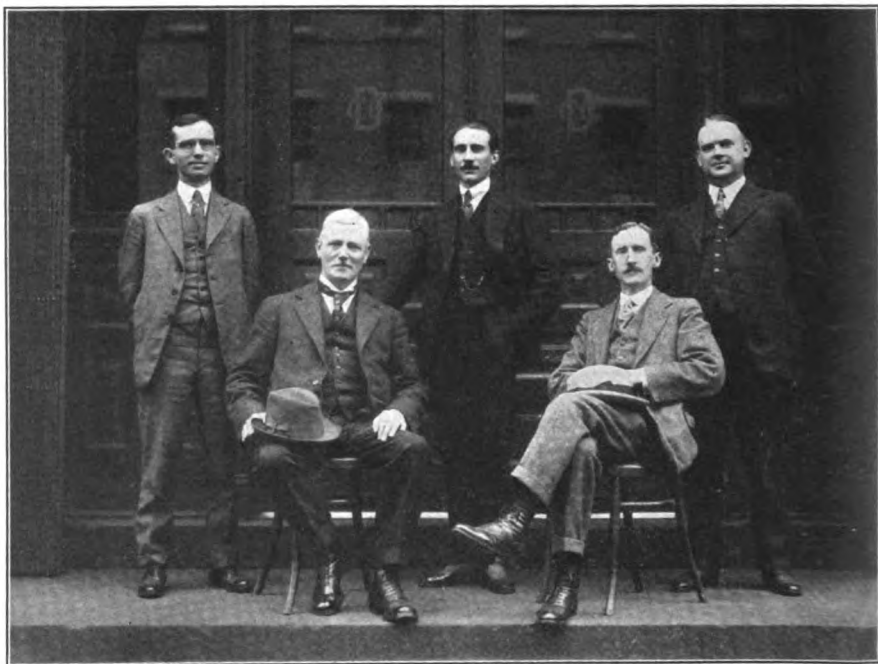
Don't argue. State facts. Don't arouse opposition in the buyer's mind. Agree with him, or dodge the issue. Lead him around to some subject where you are at one. I hate to have a seller try to prove to me I'm wrong. I don't like to admit it.

Use plain language. If you are selling automobiles don't talk about carburetors and reciprocating dudads and compound thingumbobs. Go somewhere and learn the English for these things, and how to make them clear to a washerwoman.

The thing you have to sell has certain merits; it ought to sell on those. To sell a thing upon merits it does not have is a poor policy.

Be dependable. Even if you make a casual remark, for instance, that you will send a man a bunch of blotters or a book or a calendar, don't fail to do it. Forgetting is almost as bad as lying. If you promise to come back next Tuesday, do it or send a telegram.

Remember names and faces. If you are not gifted in this respect, get a little book and every evening set down the names of the people you have met and some distinguishing characteristic of each of them. Write down any remarks your customer has made about his family. Study this. It's all a part of the important art of jollyng us along.—*San Talks*.



England, France and the U. S. A.

WE do not know when the arch of the Dixon Office Building sheltered a more interesting group than is shown in the photograph at the head of this column.

Readers of GRAPHITE occasionally hear about the gentlemen standing up at each side of this picture, Mr. J. H. Schermerhorn, Vice-President, on the reader's right, and Mr. Herman Price, Manager, Pencil Department, at the left. Both have been intimately connected with the management of the Joseph Dixon Crucible Company long enough for us to be sure that, despite their modesty, their faces are by no means unfamiliar to

dealers in Dixon's pencils who read this little monthly magazine.

The other three gentlemen are quite as well known, too, but in a different part of the world. In the center of the group, standing, is Mr. Jules Fagard, of Paris, France, who is connected with the L. G. Sloan Organization, sole European representatives for Dixon's Pencils. Mr. Fagard's field covers France and its colonies, and Belgium and Switzerland. We have spent a good many hours in his company of late, and we are of the opinion that in his hands the Dixon Pencil Line will have more than a fair chance against all competitors. The gentlemen seated are Messrs. B. Harrison, Manager, and P. W. Jinman who travels for L. G. Sloan,

Ltd., in the United Kingdom, who have strengthened the impression of the efficiency of the Sloan organization created by Mr. Sloan himself and Mr. Sim, on the occasion of their first visit to Dixon headquarters several weeks ago.



Water Tank No. 2, Turlock Water Co.

Turlock, Calif.

THE above water tank, known as Holder No. 2, owned by the Turlock Water Company, is painted with Dixon's Silica-Graphite Paint, which is a favorite paint with municipalities, water companies, and others.

Dixon's saves money, because it lasts longer and is invariably of **FIRST QUALITY** only.



Water Tank, Water Works

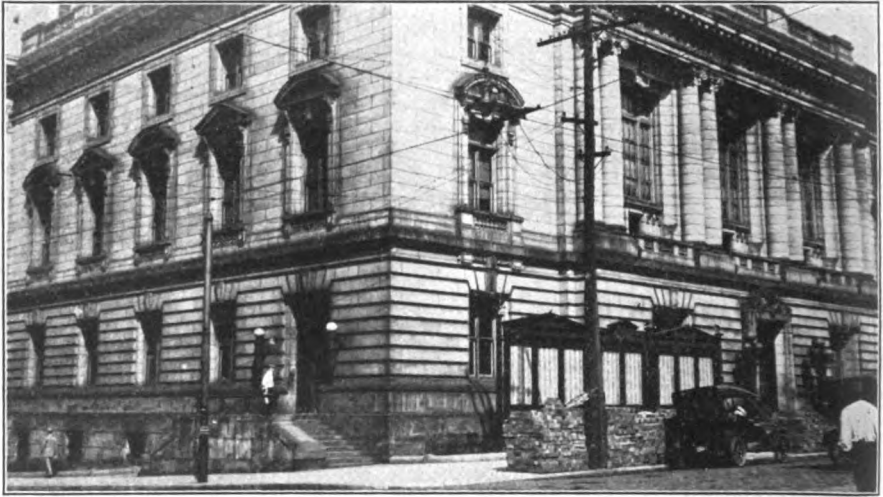
Tulare, Calif.

THE above structure was painted on the exterior in 1913 (a service of 7 years) with Dixon's Silica-Graphite Paint, and on the interior in 1916 (service of 4 years), and repainting has not been necessary to date.

More and more water companies are realizing the importance of painting the interior, as well as the exterior of tanks.

Dixon's Paint is a safe paint, because it does not affect or injure potable water. Try it at your next painting.

Write for Booklet No. 190-B.



Post Office Building

Wheeling, W. Va.

THE roof and other metal work of this structure was painted in 1916 with Dixon's Silica-Graphite Paint, by J. J. Maloney & Company, Contracting Painters of Wheeling, and the structure is still in excellent condition after a service of four years.

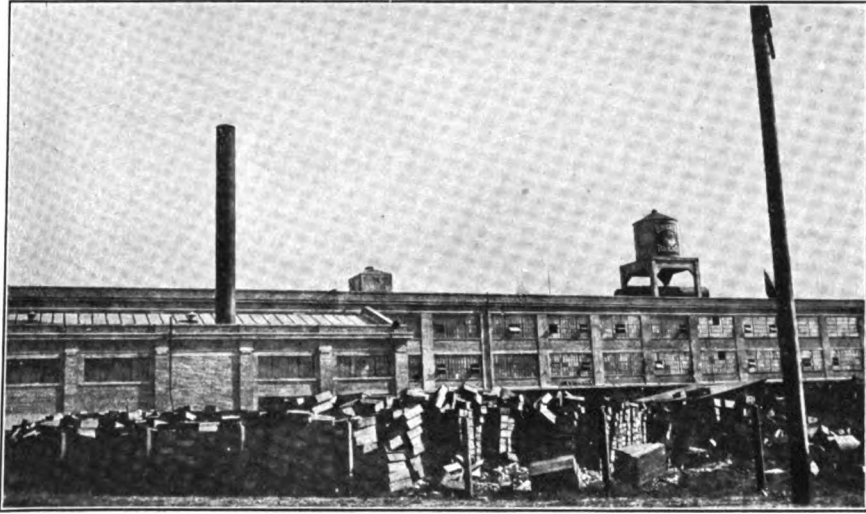
Dixon's Paint is used on many of the leading buildings of America, South America, Britain and elsewhere.

A really fine building should be protected with a real paint and real architects and owners act on this reasonable judgment.

Initiative

INIITIATIVE is the first step toward success. It is doing what should be done without being told. Brains and energy with enough mental grasp and force of character to make every stroke count is also initia-

tive. The unthinking class is very large. It takes in those who don't know and therefore cannot think; and, also, those who do know but don't think, and how much you think whether you can sacrifice your pleasures and comforts when they conflict with your aims and desires, your great life purpose. Keep absorbing new ideas as well as new air. Good ideas are only seeds, they must be planted and tilled before they can produce. He can who thinks he can, so be sure nothing can stop you and nothing can. The trouble with many men is when they accept a job they accept only a part of it. Initiative entails responsibility and you cannot be successful if you avoid responsibility. You must have character to build initiative, so with ability to win it and time and efforts to achieve it you will find that initiative is the first step.—*McCaskey Bulletin.*



Rosenberg Brothers & Co.

Fresno, Calif.

THE smokestack, tanks and other metal-work about this plant are painted with Dixon's Silica-Graphite Paint. This famous plant of Rosenberg Brothers, fruit packers, gives an idea of Fresno's vast fruit drying and packing business.

You can't have a proper idea of the economy of Dixon's Silica-Graphite paint till you use it yourself.

Unfair Competition

"How's business?"

"Not too good—thanks to some dishonest rascals who are selling goods at reasonable prices."—*Le Journal Amusant, Paris.*

Forced Transfer

ANOTHER reason why pickpockets seem to be on the increase may be because profiteering isn't what it was a few months ago.—*Dallas News.*

Fellowship

WHEN a man ain't got a cent,
and he's feeling kind of blue,
An' the clouds hang dark and heavy
an' won't let the sunshine through,
It's a great thing, O my brethren, for
a fellow just to lay

His hand upon your shoulder in a
friendly sort of way!

It makes a man feel queerish, it makes
the teardrops start,

And you sort o' feel a flutter in the
region of your heart;

You can't look up an' meet his eyes;
you don't know what to say,

When his hand is on your shoulder in
a friendly sort of way.

O, the world is a curious compound,
with its honey and its gall,

With its care and bitter crosses, but a
good world after all,

An' a good God must of made it—
least-wise, that is what I say,

When a hand is on your shoulder in
a friendly sort of way.—*Riley.*

Fuels for Brass Melting

An Explanation of the Need for Careful Thought Before Installing Furnaces

THE fuel question is one that is demanding a great deal of attention at the present time, due to economic readjustments affecting the uses of different fuels, transportation difficulties, etc. The nations are engaged in a scramble for sources of supply of fuel oil, owing to the economic advantages it offers on ship board. This bidding and contracting for oil for marine and naval uses has sent the price up enormously, and the indications are that oil for industrial heating must give way for the time being to a less essential fuel.

The best fuel for melting brass or for any other purpose for that matter, is that which will give the best quality product for the least manufacturing cost; and it should always be remembered that it is not the fuel cost but the cost per pound of brass melted that is the criterion.

Coal and coke, with the pit type furnaces, are the old standby of the brass industry, and most of the brass produced in the country today is melted in this manner. The results obtained are eminently satisfactory as far as flexibility, reliability and quality of product are concerned. For the small installation in the foundry and for small heats of special mixtures where great flexibility is required, coal and coke pit fires are most satisfactory and inexpensive. The investment required in pit, coal or coke brass melting furnaces is less than with any other; also there is still an open question if this is not also the case in the large casting shops and brass mills.

In considering the question of brass melting furnaces, attention should be given to the design and construction of the furnace, whatever type of fuel is used. Thus, for example, there are well designed coal furnaces and badly designed coal furnaces; well designed gas furnaces and badly designed gas furnaces, and it is not reasonable, for instance, to compare the well designed coal with the badly designed gas furnace. It is quite common to lay particular stress on the fuel used

and to group furnaces according to fuel, so that we find general references to "gas furnaces," "coal furnaces," "electric furnaces," etc., with little or no regard for the design and construction of the furnace.

Oil is a most desirable and easy fuel to handle, but at the present time it is expensive and hard to obtain and the present rate of consumption indicates greater future scarcity and much higher prices, so that it is inadvisable to install equipment requiring large quantities of this fuel.

City gas is not so expensive when its satisfactory work is considered and bearing in mind the fact that it is not fuel cost, but the cost of the finished product that counts we find that brass can be melted as cheaply with city gas as with coal and coke if all the factors are considered. Among those factors may be mentioned:

1. Less labor required to operate the furnaces with gas.
2. Longer life of crucibles.
3. No ashes to handle or treat.

These factors are of the greatest importance and obtain with all types of gas fuel in crucible furnaces. Careful consideration shows the use of gas to be economical and satisfactory in brass melting practices. All of the advantages of the crucible method of melting with its flexibility and ease of control are retained, with a great reduction in cost over the coal fired furnace. For example, few people realize that brass can be melted cheaper by using city gas at 80c. per M than with anthracite coal and coke. In this case, the difference in the price of fuel is more than counterbalanced by the great saving possible in labor and ash treating, etc., and by the greater speed in melting.

The available fuels may be listed as follows:

- Coal.
- Coke.
- Fuel oil.
- City gas.
- Producer gas.

Water gas and various similar types of manufactured gas.

Natural gas.

Electricity.

The questions that immediately come to the mind of the prospective purchaser of equipment is "What gas shall I use in my crucible furnace" and "Shall I make it or buy it?" Obviously for the small installation, gas must be bought, either city gas from the local gas works or some form of manufactured gas from producers in other plants in the district.

Manufactured gas can be used to great advantage in crucible melting and by many is regarded as much more satisfactory than either oil or natural gas because of the lesser tendency to oxidize the carbon in the pots.

The abundance and cheapness of natural gas, oil and coal in America has retarded the development of processes and equipment for the economical production of fuel, and the economic use of coal through the production of coke and gas as practised in Europe is but little known and realized. In view of the greatly increased cost of fuel in all forms in the United States, development along the lines indicated present enormous possibilities.

The problem might be termed one in "Metallurgical Economics." Comparing brass melting with gas and brass melting with electricity, for instance, it is necessary to determine:

1. Whether it is cheaper to burn coal to produce electricity, which is in turn used to produce heat; or to produce gas and by-products, and use the gas for heating.

Because of the high cost of electrical power and the enormous cost of the electric furnace, no matter what make, and also the fact that the electric furnace for melting of non-ferrous metals is yet in the experimental stage, it is unwise to consider the installation of that form of melting without a very exhaustive study of the subject. One contemplating such an installation should fortify his judgment with the most accurate information as to melting costs based on practice and not theory.

Another factor to be considered in connection with the use of gas in crucible brass melting is the fact that the same gas can be very profitably used for annealing and heat treating furnaces in the same plant, and so this also opens up further the vast economic features possible in the use of gas fuel in the world's future metal melting industry.



Smokestacks, Porterville Fruit Canning Co.

Porterville, Calif.

THE above smokestacks are protected with Dixon's Silica-Graphite Paint, and the owners are well pleased with the satisfactory service it has given.

Owners of canneries use and recommend Dixon's Paint, and if you are not already a user of it, please write us for detailed information.

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII NOVEMBER, 1920 No. 11

Thanksgiving—1920

THE third Thanksgiving since the signing of the Armistice, which ended the actual fighting in the Great War, will be celebrated by us on the twenty-fifth of November. During these twenty-four months the whole world has been engaged in another struggle. Not one of the warring countries has escaped. And this aftermath of agitation and unrest has made many anxious for the safety of civilization. We think the ship is slowly righting itself. The tremendous waves that followed in the wake of the great storm are subsiding.

What we have to be thankful for in this country since last year is a steady improvement on all sides. The forces of disorder have raised their "horrid heads," but the orderly elements of society proceed on their way, unmoved and undeterred.

It has been well said that ours is a government of laws and not of persons or personalities. From childhood up we see the affairs of state and business administered, day in and day out, in storm and in periods of calm weather, easily and without outward show of concern. We are accustomed to getting our due without burning

or blood-letting. And what this is to be thankful for we seem to know dimly, instinctively, perhaps, but none the less compellingly. This is at the bottom of sanity: this is the foundation rock of safety for ourselves and families.

What they did for this security who "nobly fought and nobly died" in the Great War after years will confirm. And we are thinking not only of our own men who passed on, but of all those who suffered, endured and died that the world might be better and freer. It is altogether fitting that each nation should have observances and memorials of its own to remind future generations of the heritage owed the men of 1914-1918. But aside from these it would seem that all over the world in the countries of the Allied nations one day, and the same day, should be set aside for all time to come to commemorate the Great Victory in thanksgiving. And that day should be in the month of November,—and, looking at the meaning of our own Thanksgiving Day, what better day than this to propose to the rest of the world for this purpose?

Hubby's Hue

AT Deauville women are using colored face powders to match their frocks. But whatever the hue of the latest purchase, the husband always looks a little blue.—*Lady's Pictorial*.

Distances

"WHERE do you live in the city—close in?"

"Fairly so—thirty minutes on foot, fifteen by motor-car, twenty-five by street-car, and forty-five by telephone."—*Kansas City Star*.



Rhode Island Stationers Meet

THE Rhode Island Stationers Association was organized during the month of September. The active membership consists of the commercial stationers of Providence and the other cities of the state, with the usual associate members.

When the question of choosing a president for this new association came up only one man was considered, and he was Mr. Howard L. Wheeler, of The Preston & Rounds Company, who has for so many years held the good will and esteem of his competitors as well as his own customers. For Mr. Wheeler is a man that every one likes to do business with. The traveling salesmen of the New England stationery trade consider Mr. Wheeler an ideal buyer.

He is one of the men, they say, that treat a salesman the same as a customer,—being equally gracious to both,—which is very high praise, indeed, and worthy of record.

The other officers of the Association are: Herman A. Bill, of Providence Paper Co., Vice-President; William B. Freeman, of E. L. Freeman Co., Treasurer; Arthur C. Arnold, Printer and Stationer, Secretary.

Membership Committee: H. B. Van Dorn, Jr., Joseph Dixon Crucible Co., chairman; Harrie E. Cope land, Boorum & Pease Co.; Wm. J. Driscoll, Carter's Ink Co.; G. E. Nelson, Jr., Esterbrook Steel Pen Manufacturing Co.

Home

THERE are people who have no sense of home. Where do they come from? From almost anywhere. A sense of home is, geologically speaking, a comparatively recent acquisition. Man has been a wanderer from time immemorial. In so far as he has been able to conquer climate, he has fixed his habitation, and his abiding place has softened him into a sense of tranquillity; but even at this date it has not gotten into his bones. Home is an ideal.

Yet those who have no sense of home are those incapable of having an ideal. The true home-lover may become restless; he may have home, but generally he cannot wait to get back. To him home is something beyond the material thing it seems to be; it stands for peace; it is a true shelter for the soul, even if it is an illusion.—*Life*.



Plant, Lamie Chemical Company

Huntington, W. Va.

HUNTINGTON, West Virginia, is on the world-map, largely through the achievements of the Lamie Chemical Company.

This concern manufactures dyes and chemicals. They have recently discovered a new series of dyes, not known before, which they export the world over.

The Lamie Chemical Company uses Dixon's Silica-Graphite Paint throughout its plant. It has given remarkable service on their metal and wooden acid tanks.

Also they use Dixon's No. 3 Graphite Cup Grease which gives them complete satisfaction.

Moreover we believe the Lamie Chemical Company's genial purchasing agent, Mr. Eugene Herbert, uses a Dixon "ELDORADO" pencil when he is posing his "smoothest" thoughts!

Dixon's graphite products make many hard roads easier, and they

finally take the user of lubricants, paint, crucibles, pencils, etc., to his desired goal—economy!

The Dixon Company also has done something in world map-making. Its graphite products have been manufactured since 1827 and are known and used the world over.

Write for Booklet No. 190-B and special information in your line.

Unfair Fares

PASSENGER: "Three pounds ten?—but, my good man, I don't want to buy Glasgow, I only want to go there!"—*London Mail*.

Affections Fount

"HE never learned to appreciate her good qualities until they quarreled."

"Evidently a case of love at first fight."—*Life*.

New Political Danger

HORRIBLE thought! Perhaps deciding whether to be a Republican or a Democrat may develop wrinkles.—*The Shoe and Leather Reporter, Boston*.

I AM——?

A tiny seed that produces wonderful fruit.

I am such a simple little thing that many people never take the trouble to use me.

I am an important factor in winning success, yet the majority of people have no idea of my value.

I act like lubricating oil on human machinery and make the wheels of life run smoother.

I give grace and sweetness to social intercourse and am constantly used by the well-bred.

I send customers away from banks, shops, restaurants, and markets with a good taste in their mouth, so that they feel like coming again.

My spirit is to please, to help, to make life sweeter, to take the sting from hard things, to appreciate all right effort.

I am like the sunbeam which brings brightness, warmth, courage, cheer into many a discouraged heart.

I am used in the most successful commercial establishments, wherever anything is sold, whether the transaction amounts to a million dollars or only a nickel.

I am the tiny wedge that has opened the door of opportunity to many a poor boy who had no one to give him a helping hand.

The use of me marks the difference between the boor and the gentleman, between the kindly, gracious soul and the crabbed grouch.

I AM "THANK YOU."

—O. S. M., *New Success*.



Shingle Roof, R. R. Touhy Residence Merced, Calif.

THE shingle roof on this beautiful bungalow is painted with Dixon's Silica-Graphite Paint, Natural Color.

Dixon's Paint is widely used on shingle roofs, and also on the body of wooden houses, because it lasts many years and only the lighter decorative trimmings need to be "touched up" every year.

Mr. Touhy operates the "Highway Garage" in Merced, and, of course, he also handles Dixon's Automobile Lubricants for automobiles.

Dixon's Center Plate Grease

MAKES a train flexible and consequently prolongs life of wheels and saves in tractive power. The flake graphite lubricates long after the grease itself has disappeared.

Facts about the Bible

THE word "bible" means "the book." The old testament was originally written in Hebrew on scrolls of parchment, linen, or papyrus.

The septuagint, or first translation, was the work of learned Jews, known as the "seventy," at Alexandria, about 285 B.C.

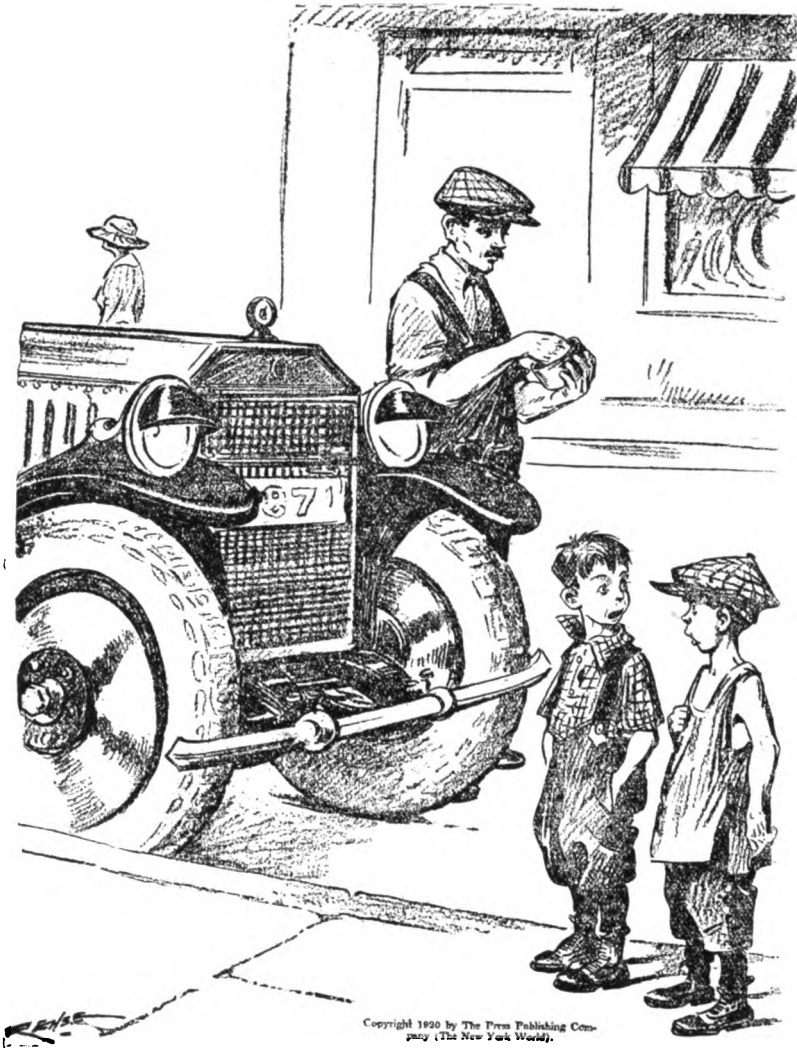
The first translation of the entire bible in English was by John Wycliffe, about 1380.

Now it is translated into more than 500 different languages.

The very first book printed from movable type was the bible. This work was done by Johannes Gutenberg in 1456.

The bible is credited to about thirty authors, covering a period of 1600 years.

The bible contains sixty-six books, 1189 chapters, 31,173 verses, 773,746 words, and 3,566,480 letters.—*House Organ Digest*.



Copyright 1920 by The Fernal Publishing Company (The New York World).

(Courtesy—New York World)

Jimmy—"What's that stuff he's a-puttin' in the cups on the springs?"

Patsy—"Why, that's graphi-grease to make 'em quit squeakin'."

Jimmy—"Gosh! when I get a car like that I ain't goin' to use grease, nothin' but creamery butter fer mine."

DIXON'S ELDORADO

"the master drawing pencil"

What it brings to your Service is Distinction; what it leaves with your Customers is satisfaction: and your profit through its sale is large in what you can count and deposit in your bank, but larger still in that good opinion of your customer, which can not be counted, *not discounted.*



*Made in 17 Leads
—one for every need
or preference*

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto



"Guide Post"



EVERY good salesman knows how much is gained by a thorough acquaintance with the uses to which can be put the goods he carries. Daily, hourly, as he goes about his work, he finds it opportune to call attention to what work this is especially good for, and what that, as well as how this is selling for Jones, and what success Smith has had with another of his items.

Even in these days when advertising makes business reputations over night, as it were, many still remain in darkness,—so that it pays to keep the arc light burning all the time.

How many of those who need it from minute to minute in their work can tell you the name of the best pencil for that work?

The Intense Copying Pencil No. 2073 is made for a certain class of users. No one else can tell how much it is needed in wet copying of letters, bulletins, circulars, announcements, and notices.

Certain departments of all railroads—the department of the auditor of merchandise receipts, for example: the order department of wholesale grocers, wholesale hardware concerns and wholesale druggists,—all these can use 2073 to advantage.

When it comes to signing type-written letters and bulletins, which are to be reproduced by wet copying,—well, 2073 is just right for that. You don't need to use any special pressure in signing either, for the lead is extra soft.

If all those who need the No. 2073 pencil could read this: if they would all obey the impulse to try it,—in this event we should not be able to fill more than a small part of the orders for 2073 which would roll in to us.

But, Gentle Reader, let not this apprehension deter thee. If you think the No. 2073 may be what your copying work requires, write us, while in the mood—and we will send you a sample.

Mr. Henry Berry

Vice-President, Canadian Asbestos Co.

IT was with keen regret that we learned of the death of Mr. Henry Berry, Vice-President and General Manager of the Canadian Asbestos Company, Dixon representatives in Canada for all Dixon Products, except pencils. Mr. Berry passed away September 13, 1920, at his home in Montreal after a protracted illness.

Mr. Berry started with the Canadian Asbestos Company in its infancy, and, being strong-willed, a hard worker, and determined to succeed, he climbed upward as the business progressed.

He had a strong personality, was richly endowed with energy and foresight, and these qualities made themselves felt.

Care and Maintenance of Plunger Hydraulic Elevators

By A. B. Burgess

Courtesy of "POWER"

(Continued)

All sheaves, over which the automatic ropes, operating ropes and counterweight ropes pass, should be carefully examined daily and the grease candles replaced before being worn out. Any sheaves that are not provided with grease candles or oil cups should be oiled each day. Counterweight-sheave shaft boxes are heavily loaded, and the surface must be kept thoroughly smooth. A daily inspection here is well worth while.

The boxes which carry the operating shafts under the car platform should have their oil cups kept full. A daily inspection here is necessary. All bolts and bearings must be kept tight.

New ropes, when installed, are subject to considerable stretch and should be carefully watched. Screw connections for adjusting these ropes are provided, and when they have been taken up to the limit they are let out as far as possible and a fresh bite taken in the ropes by means of clamps. Care should be taken to have the automatic ropes adjusted so that the cars come to rest flush with the landings at both bottom and top terminals. Inspect the ropes weekly for broken wires, and rub them down with oil or some lubricant.

Daily inspect the valve, Fig. 6, by which the car is operated. All working parts must be thoroughly lubricated, keeping oil cups and grease cups full at all times. Repack the valve as soon as the elevator begins to creep. This may be accomplished in the following manner:

The car should be run to the lowest landing or, when there is no working space underneath the car, to the floor above the lowest landing and blocked, the supply and exhaust and to-and-from valves being shut. If the valve is of the pilot-controlled type, the handhole plates on the hood supporting the pilot valve and the end flange at the main valve

should be removed. A stem puller is provided with all valves. Push the main valve toward the pilot valve as far as it will go, removing the pin connecting the main stem and rack, and pull the stem out of the valve steadily without wrenching or jarring, keeping the stem concentric with the main valve throughout the operation.

To renew the leathers, take off the nuts on the stems and remove disks and quills. See that they are laid aside in consecutive order. Be sure to note the relative positions of the leathers and see that the lips always point toward the water pressure. Inspect the valve linings and the ports. See that they are free from scratches and no foreign matter is hidden in them. See that the brass surfaces are not damaged after the packings are renewed. Insert the valve stem, push it far enough into the valve to get the pin which connects it with the rack into place, then pull the stem backward until the end piston comes flush with the end of the valve.

In replacing the main valve stem, see that the rack and pinion mesh according to the marks which indicate their location. There is a possibility of the

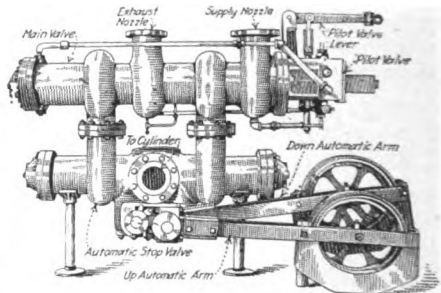


FIG. 6. CAR-OPERATING VALVE

valve becoming full of air during re-packing. The air cocks on the stuffing-box should be opened, as well as those

on the valve itself, to get the car running smoothly.

To pull the automatic stops, remove the large flange on the valve body and disconnect from the crank, taking them out from the ends of the valve after first removing the flanges. The lips of the leathers on the "down" automatic look from each other. The reverse is true on the "up" automatic. Before replacing the stem, be sure that the valve chambers are clean and free from all foreign substance. Replace all worn-out gaskets.

The pilot-valve stem is removed by taking off the bottom nuts and swinging the arm on the bottom of the pinion shaft clear. Then pull the stem, noting the position of the leathers, and renew same if necessary.

The automatic lever shafts are packed by loosening up the cap bolts on the lever head so that the driving and driven gears can be detached from the shafts easily. Before removing the levers and gears, block up the weight arm at the extreme outside end and sling weights and arms so that they can easily be slung into position after the shafts are packed. The inside collars and glands can then be removed and new hat packings put in, first seeing that the shafts are thoroughly cleansed and greased.

It is important that the valve leathers be inspected and renewed when necessary. If leathers are allowed to become worn out or if new leathers are faulty, these facts will be made apparent to the engineer by an unusual leakage of water through the drips, possibly by creeping of cars after the operating valve is closed or by unusual noise or knockings in the valve chambers.

Dixon's Waterproof Graphite Grease

FOR gears, wire rope, cables and chains, pump plungers, elevator plungers and guides, and all heavy, slow moving bearings. Unaffected by fresh, salt, acid or alkaline water; without an equal for mine pumps.

Out of Dixon "Operators'" —Out of Luck

SOME of our stationery customers have printing and engraving establishments devoted to the manufacture of commercial and social printing and engraving. Others go a step beyond and engage in the publishing of newspapers. To this last named class belongs the Bangor Publishing Company, publishers of *Bangor Daily News*. A few days ago, we received this letter signed by Mr. Walter B. Reed, Business Manager.

You are holding an order for us for two or three gross of Dixon "Operators'" Pencil No. 300. We are entirely out of these pencils and have been trying to get along with some other kind, but find it impossible to run this newspaper unless we get some of the Dixon "Operators'" Pencils.

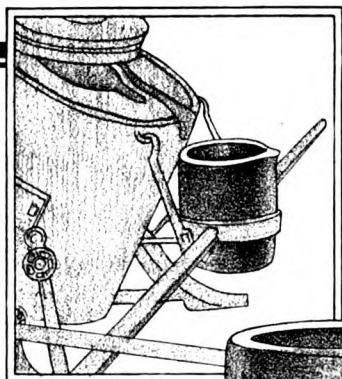
Can you send us a few dozen just to keep us going? If you do not, I am afraid we will lose our entire editorial staff.

BANGOR PUBLISHING CO.

To which we responded that the order was old enough and the circumstances grave enough to warrant an extraordinary effort on our part, which took the form of a shipment of a half gross of these much desired pencils; and then we asked Mr. Reed for permission to reproduce his letter, to which he responded as follows:

Your letter dated August 17th at hand. You have my permission to use letter regarding the pencils. It is quite a serious matter to be without Dixon's "Operators'."

BANGOR PUBLISHING CO.



Tilting Furnace Crucibles

DIXON GRAPHITE CRUCIBLES

Users of Rockwell, Ideal, Hausfeld, Case, "M.R.V.", Monarch, or other tilting furnaces will find Dixon's Tilting Furnace Crucibles and Bases for same, dependable and economical.

The name DIXON on *any* crucible gives assurance that it is *the standard* and is backed by nearly a century of experience in crucible manufacture.

Write for Booklet No. 190-A in which are shown the full line of Dixon Graphite Crucibles, their sizes and capacities.

JOSEPH DIXON CRUCIBLE CO.
Jersey City, N. J., U. S. A.



Established 1827



Melting Furnaces

Some Factors to Be Considered in the Selection of Melting Equipment for Non-Ferrous Metals

By Thomas H. A. Eastick

(Continued)

1. Time study of the melting and casting operations.

2. Composition and full details as to the size, weight and nature of the metals and scrap used.

3. Actual weights of the different metals used, analysis of the scrap and analysis of the finished casting.

4. Lower labor cost.

This is a feature which is perhaps more interesting to the trade to-day than any other. The question of labor cost in melting is very simple. It takes more labor to operate 10 units of 200 lbs. capacity each than it does 1 unit of 2000 lbs. capacity, and if sufficient flexibility, control and quality is obtained by melting in 2000 lb. lots, then so much the better and that is what should be done. The fuel and furnace to use, either for a 200-lb. charge or a 2000-lb. charge, depend altogether on the local conditions and metallurgical requirements. In general the operation of coal fired pit crucible furnaces entails a great deal of hard labor. This can be overcome by a "liquid fuel" such as oil, producer gas or even city gas for small installations. If large production and 24-hour operation are required, a producer gas plant and a regenerative furnace are to be considered. Such an installation offers great possibilities in economy and flexibility. The induction type electric furnace under similar conditions is also a feasible and economical proposition but does not afford the same flexibility. The principle of a "multi-crucible" chamber furnace with regenerative firing is used in Europe but does not seem to have received sufficient consideration in this country.

The crucible process entails very little labor except for firing the furnaces, necessitating shoveling coal, cleaning out ashes, punching out grate bars, etc. Remove this feature and there is a 50% reduction in the labor cost.

5. Better metal than by any other method of melting.

All that can be said on this subject is that the published data cannot be admitted as evidence, consisting as it does of mere expression of opinion and assertion and in the absence of any published results of investigations made. There is no metallurgical reason why better brass should be produced by an electric furnace as against the crucible, or vice-versa, or by the crucible against the tilting or reverberatory, or vice-versa. It is a question of proper operation of the furnace, skill and experience of the caster, proper preparation of the molds, etc., rather than any inherent characteristics of the furnace or fuel, that govern the quality of the metal.

In conclusion, I quote from two recent articles some remarks which should be carefully considered by the prospective purchaser of melting equipment:

(L. J. Krom, *The Metal Industry*, May, 1919, p. 220.)

"... One large electric furnace manufacturer gives out cost of operation figures by which he claims to melt metal for \$8.50 per ton as against a cost of \$13.50 per ton for the open flame oil furnace and \$19.50 per ton for coke fired pit crucible furnace. He shows a zinc melting loss of 5% for oil and 3% for coke, with a corresponding cost, with zinc at 10c. per lb., of \$10.00 per ton for oil and \$6.00 per ton for coke. These figures are undoubtedly too high, as careful melting in both cases can cut them down materially.

"He also figures 1200 lbs. of coke used at \$9.00 per ton for melting a ton of ordinary brass. This is also too high, for any good melter will be able to maintain an average of between 500 and 600 lbs. of coke consumption per ton of brass melted. Again he assumes that crucibles will give 15 heats, whereas our crucible manu-

facturers would hang their heads in shame if their crucibles did not now run close to 30 heats. He puts the cost of electrical energy at $1\frac{1}{2}$ c. per kilowatt hour, whereas it costs 2 and $2\frac{1}{2}$ c. in a good many places.

"We are criticising these figures merely to show how important it is to investigate thoroughly into every phase of the subject before investing one's money."

(C. H. Clamer of the Ajax Metal Co., one of the pioneers in Electric Furnace melting of non-ferrous metals, in a paper read to the Phila. Foundrymen's Assoc.)

"... there is no single type of furnace best suited to all conditions. A furnace suitable for one alloy or for large units may be unsatisfactory for another alloy or for small units. Continuous melting may mean all the difference between profitable and unprofitable working. Flexibility in working may be lacking in a furnace, thus placing it at a disadvantage in competition with the crucible furnace. Caution is therefore urged in selecting furnaces for melting non-ferrous metals."

For quick action use
DIXON'S
Solid Belt Dressing

Perhaps you do not use much belt dressing — but that is no reason why you should not have something dependable. Dressing should not dry out a belt, nor rot the fibre, nor cause the belt to stretch, nor clog the surface.

Dixon's Solid Belt Dressing may be used on leather, rubber or fabric. There is nothing better sold. Why not write for sample No. 190-O.



**Water Tank and
 Smokestacks**

Carpenter Milk Products Co.,
 Tulare, Calif.

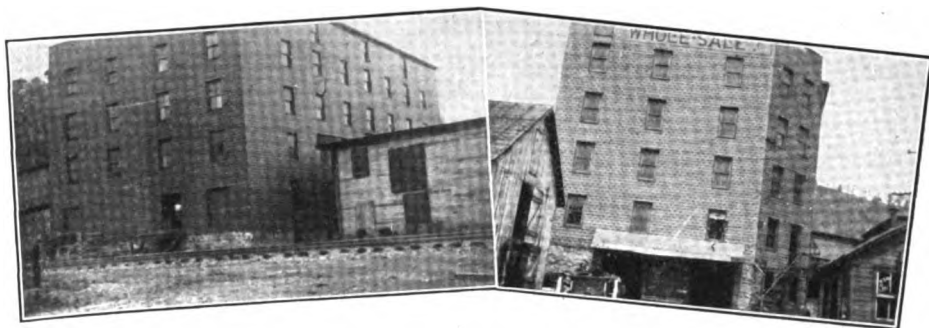
THIS tank and these smokestacks are protected with Dixon's Paint.

In the cold and sleet of our northeastern States, and in California's wonderful, dry climate, Dixon's Paint gives suitable paint protection under all conditions of service.

"Service on Surfaces" is one of Dixon's slogans.

Lost, Strayed, or Stolen

WHAT has become of the old-fashioned nickel that used to be worth five cents?—*Twin Falls Times*.



Store Building and Warehouse

Siever Hardware Co., Keyser, W. Va.

ABOVE buildings painted in 1916 and again in 1919 with Dixon's Silica-Graphite Paint. Both structures are covered with galvanized tin stamped to look like brick.

The Siever Hardware Company, one of the largest concerns of its kind in the middle South, were so pleased with the long protective as well as the decorative service given by Dixon's Silica-Graphite Paint on their buildings, that when they repainted them in 1919 they used Dixon's Paint for the second time.

Why They Do It

A SALESMAN was showing an elderly lady the virtues of the car he sells. He made a number of turns and at the proper times extended his arm as a turning signal. The old lady watched the proceedings for some time. Then she craned her neck and looked at the sky.

"Mister," she said sternly, tapping him on the shoulder, "you just tend to your driving! It don't look like rain, but if it should I'll let you know."—*Argonaut*.

Plenty of Opportunity Yet

THOSE who believe that the future offers small opportunity for industry, capital, genius, or initiative would do well to recall the words of Patrick Henry: "I know no way of judging the future except by the past." We can name six large industries that have been conceived and developed within the memory of men not yet past middle life, which now give employment to millions of people, yet fifty years ago some were only dreams and others not even imagined. Here they are: telephone, a toy in 1876; typewriter, a crude arrangement in 1878; the electric industry, a baby in 1879, when Edison invented the incandescent light; the phonograph, a curiosity in 1890; the automobile, a buggy with a gasoline engine in 1895; and moving pictures, a flickering experiment in 1896. When we remember the number of people employed in these industries and their allied offshoots, all the growth of less than half a century, we need have no trepidation about the future. Unknown, undreamed inventions and industries are just around the corner.

—*Salt Seller*.



Not Affected By Heat or Cold

The thermometer means nothing to Dixon's. Heat does not break it up. Cold does not congeal it.

Dixon's puts between your gears a protecting film of smooth, velvety lubricant that works to perfection, year 'round, in any climate. This is one reason why it is better than plain grease and oil.

DIXON'S Gear LUBRICANT

Here's another. The greater the load, the more effective Dixon's becomes. Pressure merely forces it more firmly into the minute irregularities on your gear and bearing surfaces.

Dixon's builds up a lasting film of lubricant that keeps your gears quiet and friction-free.

The result is simple arithmetic. Add a lot to your power, mileage and general satisfaction. Subtract from your operating costs. You know the answer.

Your dealer can supply you with Dixon's.

Dixon's 677 for your differential and transmission. Also the famous Dixon's Cup Grease and other Dixon Lubricants. They come in snappy red cans.



JOSEPH DIXON CRUCIBLE COMPANY
Established 1827

Jersey City, New Jersey

Graphite

DECEMBER, 1920

VOL. XXII

No. 12

Christmas Greetings



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED
1827

JERSEY CITY, N. J., U. S. A.

INCORPORATED
1868



*Miners, Importers and Manufacturers of
Graphite, Plumbago, Black Lead*



OFFICERS

GEORGE T. SMITH, *President*
HARRY DAILEY, *Secretary*

J. H. SCHERMERHORN, *Vice-President*
WILLIAM KOESTER, *Treasurer*

JOHN I. McCOMB, *Assistant Secretary*

J. W. ROBOTOM, *Assistant Treasurer*

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WILLIAM G. BUMSTED
J. H. SCHERMERHORN

GEORGE E. LONG
EDWARD L. YOUNG
HARRY DAILEY

ROBERT E. JENNINGS

Comptroller
JOHN J. NEVIN

Purchasing Agent
JOHN I. McCOMB

DISTRICT SALES OFFICES

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Pencil Dept. Products

Canada and Newfoundland
A. R. MACDOUGALL & Co., LTD.,
468 King St., West, Toronto, Ont.

*Central and South America,
Cuba and Porto Rico*
NATIONAL PAPER & TYPE Co.,
32 Burling Slip, New York, N. Y.
Offices in Principal Cities

Europe, Africa and India
L. G. SLOAN, LTD.,
41, Kingsway, London, W.C. 2
Representatives in Principal Cities

Australia
WILLIAM LEWIS,
Stafford House, Sydney, Australia

Philippine Islands
PHILIPPINE EDUCATION Co.,
Escolta 34, Manila, P. I.

China and Japan
AMERICAN TRADING Co.,
25 Broad St., New York, N. Y.
Offices in Principal Cities of China
and Japan

Graphite Products

WALWORTH INTERNATIONAL Co.,
44 Whitehall St., New York, N. Y.

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London
Milan

Australia

Sydney

Asia

Calcutta
Shanghai
Soerabaya

Latin-America

Havana, Cuba
Mexico City, Mex.
Sao Paulo, Brazil
Buenos Aires, Arg.
Santiago, Chile

Canadian Agents

CANADIAN ASBESTOS Co.,
Montreal, Quebec

Graphite

A MONTHLY MAGAZINE PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

AT JERSEY CITY, N. J.

U. S. A.

Volume XXII

DECEMBER, 1920

Number 12

Durability in Paint

PAINTS are not as durable to-day as they were in historic times, partially because we are now using them in damp climates.

The Parthenon at Athens was colored originally. Disentombed Pompeii and Herculaneum show that the ancient Romans used paints. The pyramids and tombs of Egypt and of Mesopotamia have given up paint and color exhibits from four thousand to six thousand years old.

The ancient savages used paints and dyes. They made them comparatively durable, by adding grease to resist dampness, and vegetable dyes to hold color.

To-day a paint is called upon to resist chemicals, dampness, wear, cold, heat, and ice, and in largely settled cities the air is charged with destructive chemical fumes. Therefore, we moderns have devised the mineral paints, the vegetable oil binder, and especially the silica-graphite component, which best resists wear and dampness. Exclude dampness and you get durability, and the imagined "electrolytic stimulators and determinates," and other such corrosive agents, won't be able to get at the metal. Impermeability of the film to gases and moistures is the most important quality of a protective paint.

Flexibility is also part of that quality. The fish-like scales or flakes of Dixon's

Ticonderoga flake graphite allow perfectly for expansion and contraction—all within the essential limits of an air-tight and moisture-proof adhesiveness to the painted metal or wooden surface.

Never let a bright, dry day pass without thinking of painting. Get your painter to work on a dry day and a dry surface. Too many of our days are damp and wet. A dry day is therefore a jewel to the wise painter who would assure himself of economy.

Moreover, have the surface put in proper painting condition. As well serve food in unwashed dishes as to put new paint on a dirty, rusty, greasy, dusty, wet, or unbrushed surface.

It is said by paint authorities that 70% of paint is wasted by not conforming to proper painting conditions. Supposing your dentist filled your tooth without cleaning out the old cavity? That is a sufficient illustration. If Dixon's Silica-Graphite Paint will give you five to ten years or more service, on a bridge, tank, roof, iron fence, or other structure, as it will, do you, Mr. Practical Man, want or need any more proof than this?

Don't waste labor. Labor is a diamond, judging by what the workmen think of their services: \$10.00 a day. Dixon's Silica-Graphite Paint, once on, gives long service, thus saving you many labor charges. It is not the cost *per gallon* but the cost *per year* that counts.

We could talk the academics of paint forever, but what *you* most want and need is long service, and Dixon's gives that.

As a decorative paint for residential purposes, Dixon's Silica-Graphite Paint has been found to be without an equal. The body of the house can be painted with any of Dixon's four colors and the trimmings with a lighter colored paint. The trimmings can be touched up each year, but on the main body Dixon's will last and look well for many years without the cost and trouble of repainting.

You undoubtedly have noticed in country towns, barns, tanks, ice houses, outbuildings, fences, and other structures which have not been painted for many years, and consequently are in a dilapidated condition. People who do not protect a structure when it needs painting or repainting are wasters. America used to be a country of well-kept buildings. Such shiftless waste as one often sees now bears on its face its own condemnation.

We make the following appeal to patriotic farmers, house and factory owners: "Who will get a ladder and a paint-pot and join the brush brigade of Economy Upkeep?" by using now protective paints that give the longest service and a satisfactory appearance.

Don't let structures fall down and thus lose all your capital. Have a paint and maintenance policy, which costs little *per year* if you act intelligently.

Dixon's Motor Graphite

PREPARED from the choicest Flake Graphite and is ground extremely fine. For cylinders, chains, springs, tires, wheel rims, bearings,—in fact wherever friction occurs. Its function is to eliminate friction and wear of parts and to increase power.

◆

MABEL: "Did the doctor treat you?"

HELEN: "No; he charged me five dollars."—*Jester*.

Colored Pencils Influence Learning in Albania

BRILLIANT pencils, with colorful lead and colorful wood, give the schoolrooms in Albania the appearance of a rainbow. Red, yellow, and blue crayon-marks ornament the blackboard, and though, in a pinch, the pupils sometimes are obliged to use a mere black pencil or an ordinary piece of white chalk, they prefer the colored ones if they can secure them.

Colored lead pencils, it seems, produce studiousness among Albanian pupils. This fact was discovered by the Junior Red Cross, which had organized a school at Scutari and had engaged an American teacher to officiate. This unknowing distributor of the rudiments of knowledge innocently gave her pupils pencils with black lead. The effect was disastrous. The children were restless. Interest was lacking. Some ceased to attend classes.

Finally the teacher went forth to visit the Albanian schools, seeking an answer to her problems. And she found it in the type of lead pencils used by the pupils. They were all colored. Black ones were scorned.

So, with new supply on hand, interest was obtained once more and the Junior Red Cross is flourishing.

◆

"MADELINE is quite a noisy girl."

"Yes, she combs her hair with a bang."—*Froth*. ◆

HAROLD: "Bring me an egg-nog."

WAITER: "We have plenty of eggs, sir, but we are all out of nogs."—*Punch Bowl*.



ALBERT NORRIS

The many friends and business associates of Albert Norris were sorely grieved to learn of his death, October 25, 1920, in Jersey City, N. J., after a six months' illness.

Mr. Norris had been with the Dixon Company for thirty-three years, having first entered their employ in January, 1887. He was connected with the Pencil Factory for some time, and installed a very excellent system of accounting. From there he was transferred to the General Office, and among the various positions held were Paymaster, Statistician, head of the Advertising Department, General Auditor, and head of the Accounting Department.

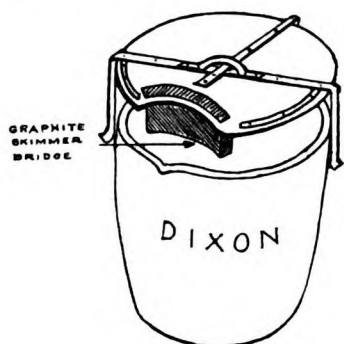
On October 21, 1912, the Board of Directors of the Dixon Company elected him Assistant Secretary and Assistant Treasurer, which position he held at the time of his death.

Mr. Norris was born in Kingston, N. Y., in 1859, and in 1889 married Miss Mary Edith Evans, who survives him. His permanent residence was at Mt. Tabor, N. J.

Besides his widow, Mr. Norris leaves two sons, Alfred G. and Albert, Jr.

Funeral services were held in Jersey City at St. Paul's P. E. Church and interment was made in the family plot at Kingston.

Mr. Norris is mourned by all, for we learned to appreciate him for his genial manner, his generous nature, and his many other admirable traits.



Dixon's Graphite Skimmer Bridge

THIS crucible cover is made from sheet iron with graphite skimmer bridge and is to be put in place after the crucible has been removed from the fire.

Its use will do away with spelter or zinc smoke and other noxious fumes from melted metal in process of pouring.

Also, it does the work of the extra man who is now required to keep back the dross, when pouring is done in the old-fashioned manner. Write to Dept. 190-A for prices.

Earthquakes and Dixon Crucibles

THE following letter received from Mr. T. N. Chambers, the Dixon representative in Santiago, Chile, tells of an unusual test for Dixon Crucibles.

"We had an earthquake shock here last night which lasted about 30 seconds. It was a very strong shock and everybody was expecting their house to fall about their ears.

"This morning, I was rather concerned to see the damage done to my office. I was quite prepared to see all my breakable samples in pieces, but you can imagine my delight when I found that, although my Dixon Crucible samples had fallen from their 'high estate' (5 feet 6 inches) onto the floor, not one of them was broken.

"In fact, one 'F' Sand Crucible had evidently been caught on the bounce, because it eventually settled in an upright position.

"As a friend of mine remarked, 'Strange things happen in these India Rubber Countries.'"

Appreciation

EVERY once in a while some letter like the one quoted comes in to the editor's desk to make his life a little more pleasant.

These letters are always more appreciated than the sender realizes, for they indicate that the efforts of the editor are not without results.

"Joseph Dixon Crucible Co.,
Jersey City, N. J.

"Attention of a Real Good Fellow.

"Do you know what we're thinking about? It's the House Organ published by your firm.

"We were thinking how grateful the Rogers Lumber Yards, Limited, would be if we were placed on your list, and how much we would enjoy the privilege of seeing each copy—not just an occasional one.

"Very sincerely,

"ROGERS LUMBER YARDS, LTD."

**John I. McComb****James W. Robottom**

New Officers

AT the regular meeting of the Directors of the Joseph Dixon Crucible Company on November 1, 1920, Mr. John I. McComb, Purchasing Agent, was elected Assistant Secretary, and Mr. James W. Robottom, for a number of years Cashier, was elected Assistant Treasurer, to fill the vacancies caused by the death of Mr. Albert Norris.

Mr. McComb entered the employ of the Dixon Company June 29, 1896. For several years he was assistant to the Purchasing Agent, Mr. Harry Dailey. In 1907 Mr. Dailey was elected Secretary of the Company

and Mr. McComb was made Purchasing Agent. This position he also holds at the present time.

Mr. Robottom came with the Dixon Company in the year 1891 and was connected with the Accounting Department for several years, later being made Cashier. This latter position he held until about a year ago, when ill health forced him to take a much needed rest. Upon his return several months ago he was elected Assistant to the Vice-President.

Mr. McComb and Mr. Robottom will prove the good judgment of the Directors in electing them to these positions.



National Business Show, 1920

OUR first bite at the National Business Show in New York was only a nibble. The illustration does full justice to our booth, which was very well situated and visited by hundreds interested in the finest Pencils, Colored Crayons, and Rubber Erasers for their work.

Mr. J. Kip Edwards, who is seen standing at the right of the booth, set up the exhibit. The job was very well done, indeed. On Mr. Edwards fell the brunt of the affair until our Mr. G. H. Reed came along to assist him.



Dangerous to Try It

GASOLINE and fools won't mix, either.
—*Columbia (S. C.) Record.*

Satisfied and Testified!

THESE words rhyme in the opinion of users of Dixon's Silica-Graphite Paint, and we are proud to quote the following testimonials from concerns which are first in their line.

Mr. George P. Haslam, Treasurer of the Coosa Manufacturing Company, Piedmont, Alabama, writes: "In reply to your letter of October 11th, will say that we painted all the metal work around our plant in 1918 with Dixon's Silica-Graphite Paint and have not been in the market since that time. We expect to do some metal painting possibly next year and will then need some more of your paint."

Mr. Joseph B. Sessions, Treasurer of the Sessions Foundry Company, Bristol, Connecticut, writes: "We

have your favor of the 14th regarding Dixon's Silica-Graphite Paint. Would say that we already have on hand a sufficient quantity of this paint to last us for some months to come. We have used it for a good many years and have found it satisfactory."

The American Paper Goods Company, with factories in Kensington, Conn., Brooklyn, and Chicago, and sales offices in Boston and San Francisco, writes: "We are entirely satisfied with Dixon's Silica-Graphite Paint, and when our supply is exhausted we will favor you with a further order."

Mr. John E. Boal, President of the Sweetwater Water Corporation, National City, California, writes:

"We are not large users of paints of any kind, but we have used Dixon's Silica-Graphite Paint for our small needs in one or two of our departments. Personally, I can testify to the excellence of Dixon's Paint for roofs, for I have used it on my home for many years."

Saying it with Flowers

IF you consider her a wise girl, say it with sage.

If you think her cold, say it with snowdrops.

If you desire to marry her, say it with a poppy.

If you know she has a sweet tooth, say it with candytuft.

If she impresses you as a sad girl, say it with rue.

If she is of a happy, joyous nature, say it with gladioli.

If she seems a prunes and prisms sort of girl, say it with primula.

—*Family Herald and Star.*



Water Tank

City of Turlock, Calif.

THIS picture gives a suggestion of California's beautiful fruit groves. The water tanks owned by the city of Turlock are painted on the interior and exterior with Dixon's Silica-Graphite Paint.

It is Not Easy

To apologize,
To begin over,
To admit error,
To be unselfish,
To take advice,
To be charitable,
To be considerate,
To keep on trying,
To think and then act,
To profit by mistakes,
To forgive and forget,
To shoulder a deserved blame,
BUT IT ALWAYS PAYS.

—*Doherty News.*

Graphite

PUBLISHED MONTHLY BY THE
JOSEPH DIXON CRUCIBLE CO.,

AT JERSEY CITY, NEW JERSEY, U. S. A.

In the interests of Dixon's Graphite Productions, including Crucibles, Lubricants, Pencils, Paint, etc. Sent free upon request.

Vol. XXII DECEMBER, 1920 No. 12

I Believe

"I BELIEVE in the stuff I am handing out, in the firm I am working for, and in my ability to get results.

"I believe in working, not weeping; in boosting, not knocking; and in the pleasure of my job.

"I believe that a man gets what he honestly goes after, that one deed done to-day is worth two deeds to-morrow, and that no man is 'down and out' until he has lost faith in himself.

"I believe in to-day and the work I am doing; in to-morrow and the work I hope to do, and in the sure reward that the future holds.

"I believe in courtesy, kindness, in generosity, in good cheer, in friendship and in honest competition.

"I believe there is something doing somewhere, for every man ready to do it.

"I believe I'm ready—right now."

—Elbert Hubbard.

Coöperate with the House Organ Editor

THE following is an extract from "Merchandising Advertising," published by *Successful Farming*. It presents the desires of the editor of GRAPHITE better than anything else.

"It is a good plan to carry a small camera with you at all times. Pictures of window displays, the signs or hangers which you have put up, are desired by many editors, in order to stimulate the sales force in the proper use of the firm's advertising material.

"Photographs of the actual use of the products which you sell are always valuable. Many a picture of a tractor in operation forwarded by salesmen have not only been published in the house organ, but have also been used by the advertising department in booklets and catalogs.

"Perhaps you have had charge of or arranged a booth at a county or state fair. A photograph of it may suggest good ideas to some fellow member of the sales force a thousand miles or more away.

"The brief 'write-ups' of how an exceptionally difficult sale was made may be used by the editor to stimulate the sales organization. Perhaps you are not an artist or a cartoonist, but you may furnish an idea which can be readily executed.

"This work can be so handled that it need not interfere with regular sales work. Your dealers or customers will appreciate a copy of the issue containing a photograph of their store. A lonesome Sunday on the road can be used to advantage in writing your material for the editor."

The Golden Rule in Business

SOME years ago Willis L. King, Vice-President of the Jones & Laughlin Company, one of the greatest steel concerns of America, in an address before the American Iron and Steel Institute took as his subject "The Golden Rule in Business."

Mr. King claimed that in every business relation, whether dealing with customers, competitors, or employees, it was possible to follow the Golden Rule as the surest guide in all business dealings. His address was enthusiastically received by the hundreds of leaders in the iron and steel industry who were present.

Since that meeting there has been a wide-spread development of the thought that in all human relations men should strive to put into practice the divine command to do unto others as we would that they should do unto us. But what a revolution in human affairs would be inaugurated if all men practised that doctrine!

If all employers would honestly put themselves mentally in the place of their employees and then study the meaning of that command, there would be a mighty change for the better.

If all employees would put themselves in their employers' place and endeavor fully to carry out that teaching, there would be no slacking, no inefficiency, and no effort to brow-beat and bulldoze other men who did not belong to their particular union.

If all buyers and sellers would faithfully do unto each other as they would wish others to do unto them under similar circumstances, honesty would everywhere prevail, and the

world's business would move forward to a higher and nobler plane, with larger prosperity for all.

No man is living a true life, no man is doing his full duty to himself and his fellow-men as employer or employee, as buyer or seller, who cannot conscientiously say that to the very best of his knowledge he is seeking to carry out this supreme rule of human conduct.

No man is thoroughly honest at heart who is not willing to examine himself to see if his motives square with this divine command, which is just as binding as those which say, "Thou shalt not steal"; "Thou shalt not murder"; "Thou shalt not commit adultery." Men may follow these commands and still utterly fail if they do not follow that other command which says, "Whatsoever you would that men should do to you, do ye even so to them." It may be well-nigh impossible to attain unto that heavenly height of conduct, but it is possible to strive unceasingly and honestly to do so.—*Manufacturers' Record*.



Looks That Way

"WHO won the war?" asked the bright young goof behind the soda-counter.

"Huh," ejaculated the ex-sergeant gruffly as he dug up the war-tax, "I think we bought it."—*The American Legion Weekly*.



"By nature men are nearly alike; by practice they get to be wide apart."

Your Failure Depends on Your Close Acquaintance with Him

I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars of the world.

I am more deadly than bullets, and I have wrecked more homes than the deadliest of siege-guns.

I steal, in the United States alone, over \$300,000,000 each year.

I spare no one, and I find my victims among the rich and poor alike; the young and old; the strong and weak; widows and orphans know me.

I loom up to such proportions that I cast my shadow over the field of labor from the turning of the grindstone to the moving of every railroad train.

I massacre thousands upon thousands of wage earners in a year.

I lurk in unseen places, and do most of my work silently. You are warned against me, but you heed not.

I am relentless. I am everywhere; in the home, on the streets, in the factory, at the railroad crossings, and on the sea.

I bring sickness, degradation, death, and yet few seek to avoid me.

I destroy, crush, maim, take all, and give nothing.

I am your worst enemy.

I am CARELESSNESS!

—Hardware World.



Dixon Salesmen in Southern California

THE above photograph shows the Dixon salesmen who spread the gospel of Dixon's Automobile Lubricants throughout southern California.

They are, reading from left to right: Messrs. H. L. Hewson, Chas. T. Matthews, Kenneth Kellogg, and G. D. McDonald.

In the background is seen the Dixon Sample Room, No. 2207 So. Main St., Los Angeles, Cal.

Prepared for Rest

"CAN you come and help me clean house, Mandy?"

"No'm; can't come. I's j'ined de 'Sociation ob de Folded Hands."—*Life.*

More Selling Needed

MORE selling will induce more buying, and it is becoming increasingly apparent to all engaged in national marketing that a "show-down" in salesmanship has come.

There are no more adverse factors entering into the merchandising problem to-day than there were eighteen months ago, save as they have been created by the attitude of those who have let the change from a seller's to a buyer's market overtake them and catch them unprepared.

The cure for the "sick" market now seemingly prevalent is, according to Rowe Stewart, President of the Associated Advertising Clubs of the World, "More and Better Advertising," to which must be added, "More and better personal salesmanship and a good tonic of confidence."



Dixon Exhibit at Convention of American Foundrymen's Association, Columbus, O.

THE twenty-fifth annual convention of the American Foundrymen's Association, Inc., and the fifteenth annual exhibit of foundry and machine shop equipment were held at Columbus, Ohio, from October 4th to 8th.

Over 5000 people were registered, and the 75,000 square feet allotted to exhibitors were filled exactly, there being no vacant booths and no waiting list.

As is usual, the Dixon Company was among the exhibitors and were represented by A. L. Haasis, head of the Crucible Department, H. C. Sorenson, W. Houston, R. R. Belleville, L. S. Stapp, and R. F. Leonard.

Mr. W. R. Bean, of the Eastern Malleable Iron Co., Naugatuck, Conn., was elected President of the Association.



Third Street Bridge

Wilmington, Del.

THIS girder and lift bridge was painted in 1919 with Dixon's Silica-Graphite Paint.

Paint in this kind of service has to withstand every condition of wear, gases, smoke, dampness, and other corrosive and deteriorating agents. Dixon's has "made good" in municipal and railroad bridge protection the world over, some of our bridge records running to 15 years and more.

Cheap "formula paints" used by some companies and which paints are based on theories—not experience—are a "delusion and a snare," because they waste labor. Labor is too high to waste. Dixon's Silica-Graphite Paint lasts longer on the bridge and therefore saves *several* labor charges, as repainting is not required.

Write for records of long service in your line and also Booklet No. 190-B. It will help you save money.

When Coal Fires Were Illegal

COAL has not always been so valuable a commodity as it is to-day. In the early days of the industry there was a violent prejudice against coal in many quarters, and the miners were often compelled to down tools against their will! Henry III, in the thirteenth century, began by giving the people of Newcastle the Royal permission to sell the new fuel and the manufacturers of the time immediately adopted it. But the nobility of the countryside made so many complaints about the "smoke nuisance" that the King withdrew his permission. Even Queen Elizabeth, so broad-minded in many things, could not get rid of the idea that coal was bad for the health of the country, and whenever the M.P.'s came up to London for the sittings of Parliament no one in the city was permitted to light a coal fire!—*Family Herald and Star*.

The word *Universal*
means "recognized as
fitted for every need
and preference every-
where." Amongst
pencils it means

**DIXON'S
ELDORADO**
"the master drawing pencil"



*Made in 17 Leads
—one for every need
or preference*

JOSEPH DIXON CRUCIBLE COMPANY, Pencil Dept. 190-J, Jersey City, N. J.
Canadian Distributors:—A. R. MacDougall & Co., Ltd., Toronto

December Guide Post



THIS month marks the beginning of that time of the year when guide posts of all descriptions suffer most. Some are blown down; some are so covered with frozen rain and sleet that they are not decipherable; and others still are snowed under, and so of no use when most needed.

The kind of guide post which we are running, however, appeareth at stated times in all kinds of weather. This is what we call being dependable.

"Being dependable" means being punctual and accurate and faithful— which we *try* to be, at any rate.

No one can look at a decorated Christmas tree without thinking of color, and when we think of color we always associate it with the Dixon "Best" Colored Pencils.

We have just issued a chart showing the twenty-four colors in which these goods are made. Those who use colored pencils, or buy them for others to use, or who buy them to sell for others to use, should have a copy of this chart. A letter addressed to the Pencil Department will bring a copy.

Many stationers, drawing supply houses, and department stores are carrying larger stocks of Dixon's

"Best" Colored Pencils, packed in seven- and twelve-color assortments, than ever before, in anticipation of a heavy demand at Christmas-time for these goods, which are admirable as gifts. Their quality is so very fine (they cannot be made better), the package is so attractive, and the price so reasonable, that any boy or girl of any age whatsoever (and any artist or draftsman) would be tickled to receive one in the Christmas stocking.

Saying which, "The Guide Post" makes you a bow and wishes you a Merry Christmas!

Drug Trade Statistics

NUMBER of retail drug stores in the United States, 49,000.

There is one retail drug store to every 2048 of the population.

Forty-four and one-half per cent of these stores are rated at \$2000 or less.

Of these 44½ per cent, 92 per cent are without rating in the commercial agencies. Twenty-three and one-half per cent are rated at \$2000 to \$5000.

Of these 23½ per cent, 67 per cent are without rating in the commercial agencies. Seventeen per cent are rated over \$5000 and less than \$10,000. Eight per cent are rated at \$20,000 and over.

Thirty years ago the number of drug items on the market was 2699.

The number of drug items now on the market is 45,900.

The patent medicine business of the average wholesale druggist is 54 per cent of the total sales.

Of this 54 per cent, only 12 per cent are distributed in lots of one dozen or more.—*Drug Topics*.

"Thank You, Come Again"

SOME years ago, in a city of rather fair size, a young man started a "Gents' Furnishing" store. Later it became "Gentlemen's Furnishings," and still later it was "——'s Haberdashery," and continues as that unto this day, with several branches.

In the very beginning, when you went in that little shop and bought something, your package and change were handed you with a smile and a "Thank you, come again." Even when you entered the shop you were noticed, no matter how busy the man or his clerks might be, and greeted with a "In a moment!"

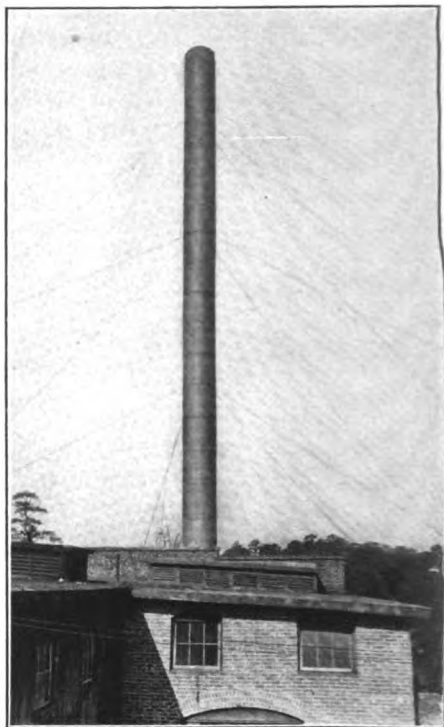
Sometimes a man meeting a friend would ask where the friend had made a certain purchase and would be told it was bought at "Thank You, Come Again's," and the place was at once recognized.

The phrase may have been stereotyped,—undoubtedly it was,—but it had a pleasing effect on the customers, and was a good advertisement. It paid dividends.

There is another man in the same city who has a very good stationery business, perhaps as good a business as anyone on the street, but his business is largely held by the politeness of his young lady clerk. He himself is apparently one who regularly gets out of the bed on the wrong side. He advertises in the papers, but knocks his advertising in the head by his manners. Yet he is evidently doing a good business, but he does not seem to grow and he has no branches.

If "it pays to advertise," it certainly pays to follow it up by being

polite to customers. There is many a man who does not know how to keep a customer after he gets him.



Plant, Tuscaloosa Cotton Seed Oil Co.

Tuscaloosa, Ala.

A User Since 1883

WE reproduce below letter received from E. B. Nuzum, President of the Tuscaloosa Cotton Seed Oil Company:

"Replying to yours of the 26th.

"As stated to your representative, Mr. W. G. Lewis, we have been using Dixon's Silica-Graphite Paint

on our smokestacks and boilers since 1883, the year in which we built the mill. We continue to find it the very best paint for the service required we know of.

"Yours very truly,

"TUSCALOOSA COTTON SEED OIL CO.,

"(Signed) E. B. Nuzum,

"President."

The Tuscaloosa Cotton Seed Oil Company are manufacturers of Cotton Seed and Peanut products and commercial fertilizers. They are also large dealers in Kainite, Nitrate of Soda, and Muriate of Potash.

A testimonial from them means something, and their example can be confidently relied upon as being based on knowledge and experience.

TO THE READERS OF GRAPHITE

So that we may keep the mailing list of GRAPHITE up-to-date and as correct as possible, we shall appreciate your advising us of any change in your address at the time such a change is made.

Joseph Dixon Crucible Co.

Advertising Department

Jersey City, N. J.

Motorists Cry "Hi! Hi!" in Japan

MOTORISTS thinking of visiting Japan are advised to read and consider seriously the following English-Japanese rules of the road that govern motor drivers in that country:

At the rise of the hand of a policeman stop rapidly. Do not pass him by or otherwise disrespect him.

When a passenger of the foot hove in sight, tootle the horn trumpet to him melodiously at first. If he still obstacles your passage, tootle him with vigor and express by word of mouth the warning "Hi! Hi!"

Beware of the wandering horse that he shall not take fright as you pass him. Do not explode the exhaust box at him. Go soothingly by.

Give big space to the festive dog that make sport in the roadway. Avoid entanglement of dog with your wheel spokes.

Go soothingly on the grease mud, as there lurk the skid demon. Press the brake of the foot as you roll round the corners and save the collapse and tie up.—*Hardware World*.



Mother's Inning

POLITICAL orators must talk of Pilgrim Mothers as well as Pilgrim Fathers or they will lose votes.—*The Shoe and Leather Reporter, Boston*.

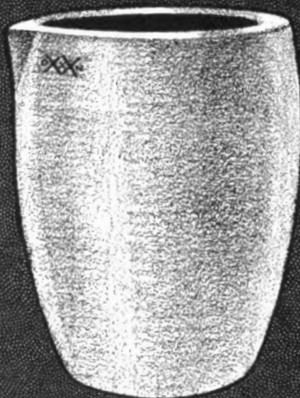


Life at Its Highest

TEACHER: "What is the highest form of animal life?"

LITTLE PETER (quickly): "The giraffe!"—*Boston Globe*.

DIXON CRUCIBLES



Since 1827



For Over Ninety Years the Standard

The experience of nearly a century of crucible manufacture is spun into the walls of every Dixon Crucible. Constant checking against this lengthy experience has given Dixon chemists an expert knowledge of the clays, graphites, and other materials that go to make up crucibles of the utmost reliability and service.

Result—foundries specify Dixon Crucibles knowing that there are none better made.

Send for Booklet 190A,
which gives valuable data
on crucible types and sizes.

Joseph Dixon Crucible Co.,
Jersey City, N. J., U. S. A.



Water Tower, Consolidated Water Co.

Bryn Mawr, Pa.

THIS water tower, the iron fence, and the sign posts are all protected with Dixon's Silica-Graphite Paint, Mr. Jos. V. Siler, contracting painter of Philadelphia, doing most of the painting.

Water companies use Dixon's Silica-Graphite Paint for several reasons: economy; purity in contact with potable water; its popularity with water companies for use on the interior and exterior of water towers.

If you are contemplating painting your standpipe, tower, or other metal work in need of paint, we shall be glad to estimate on your paint requirements.



The Kind Desired

No doubt peace hath its victories, but what the world needs is a victory that hath its peace.—*Cleveland News*.

What 256,000,000 Birds Eat

KANSAS has a bird population of 256,000,000, according to George A. Blair, of Mulvane, in a paper published by the State Horticultural Society. And these 256,000,000 birds every year eat enough insects to fill 480 trains of fifty box cars each—24,000 cars on a minimum weight of 24,000 pounds to the car. These insect trains would be long enough to reach from Oklahoma to Nebraska. Blair figures that the birds of Kansas every year eat 576,000,000 pounds of insects.

"Insect eating birds consume on a conservative estimate 100 insects a day," says Blair. "Kansas birds devour 25,000,000 every day from May to September, inclusive. For the 150 days they consume 32,000,000 bushels of insects, on the basis that it takes about 120,000 average-sized insects to fill a bushel measure."—*New Success*.



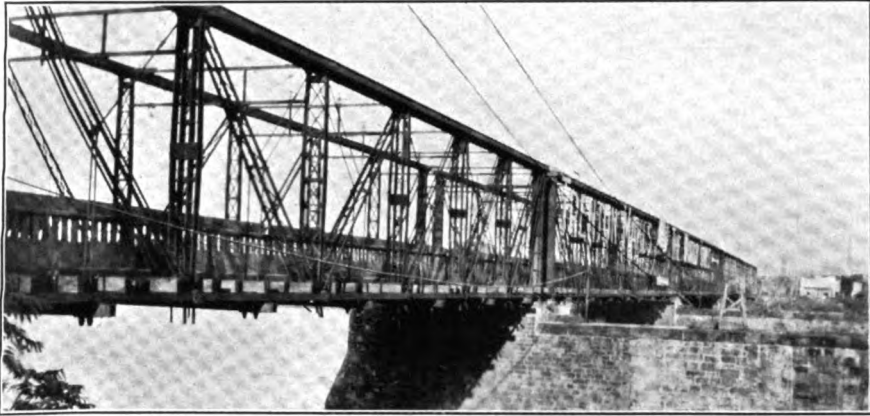
Dixon Booth Machine Tool and Engineering Exhibition London—1920

THE above illustration shows the Dixon Booth at the Machine Tool and Engineering Exhibition held in London, Eng., from September 4th to 25th. The insert shows Mr. C. R. Averill, the Dixon representative in England.

Mr. Averill is connected with the Walworth International Co., the foreign representatives for Dixon's Graphite Products, and he has his office at 28 Victoria St., London, S. W. 1.

The exhibition is organized and conducted by the Machine Tool Trades Association to bring together really comprehensive displays of machine tools and equipment. Due to the War this is only the second exhibition. Others will be held later at reasonable intervals.

Mr. Averill's progressiveness and ability are shown by his participation in the exhibition. We have good reason to believe that the sale of Dixon's Graphite Products will be greatly advanced because of his ability and energy.



Free Bridge, Trenton, N. J.

YOU are looking now at the historic Delaware River. History was made here. Washington fought here against the British under General Rahl. Washington was our great protector.

Dixon's Silica-Graphite Paint is the best protector of metal. It is used on this large bridge. A great river, the Delaware. Not only Washington, but Lincoln's grandfather knew it, for he lived nearby on the Pennsylvania side.

Dixon's Silica-Graphite Paint is made on the banks of another historic river of Revolutionary fame, the Hudson, at Jersey City, New Jersey.



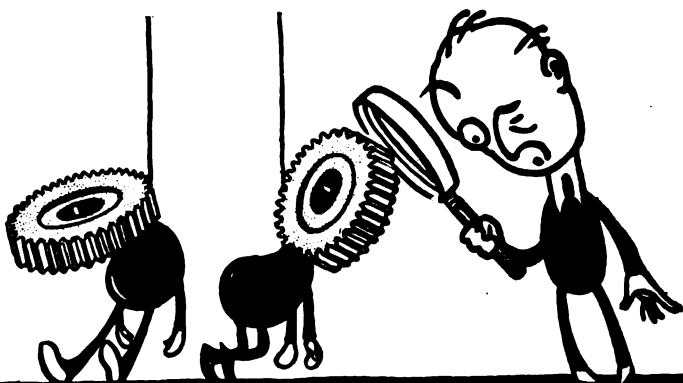
Not Like the Gentle Moon

"WAS that moonshine liquor your friend gave us?"

"It didn't seem like moonshine to me," answered Uncle Bill Bottletop. "I felt as if I'd been hit by a meteorite."—*Washington Star*.

The Art of Talking

WHAT are the great faults of conversation? Want of ideas, want of words, want of manners are the principal ones, I suppose you think. I don't doubt it; but I will tell you what I have found spoil more good talks than anything else—long arguments on special points between people who differ on the fundamental principles upon which these points depend. No men can have satisfactory relations with each other until they have agreed on certain *ultimata* of belief not to be disturbed in ordinary conversation, and unless they have sense enough to trace the secondary questions depending upon these ultimate beliefs to their source. In short, just as a written constitution is essential to the best social order, so a code of finalities is a necessary condition of profitable talk between two persons. Talking is like playing on the harp; there is as much in laying the hand on the strings to stop their vibrations as in twanging them to bring out their music.—*Oliver Wendell Holmes*.



Put Your Gears Under a Microscope

They'll look rough as stubble fields. Dixon's works into those little irregularities and makes a smooth, slippery surface that positively prohibits friction, wear, and noise.

DIXON'S Gear LUBRICANT

Dixon's can't "squeeze out", no matter what the pressure. That's one reason it's so much better than plain grease or oil.

And it's not affected by weather extremes. It gives the same perfect results when the mercury's at either end of the thermometer. You know what a big advantage that is!

The car that's lubricated with Dixon's has everything in its favor. It is smoother and quieter in operation, develops greater power and gives more miles per gallon of gas.

Do you think you can afford to do without Dixon's? Your dealer has it.

*You can't beat
Dixon's 677 for
transmission and
differential. That
goes also for Dixon's
Cup Grease and
other lubricants.
All come in conven-
ient red cans.*



JOSEPH DIXON CRUCIBLE COMPANY

Established 1827

Jersey City, New Jersey